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FLORIDA MORBIDITY STATISTICS 1988



**STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES**

GREGORY L. COLER
Secretary

STATE HEALTH OFFICE

CHARLES S. MAHAN, M.D.
Deputy Secretary for Health
and State Health Officer

DISEASE CONTROL AND AIDS PREVENTION

JOHN J. WITTE, M.D., M.P.H.
Assistant Health Officer

ROBERT A. CALDER, M.D., M.S.
State Epidemiologist

LAURA L. MACLAFFERTY, B.S.
Epidemiologist/Program Specialist

KIRK L. HUDSON, B.S.
Research Assistant

**STATE HEALTH OFFICE
DISEASE CONTROL AND AIDS PREVENTION
EPIDEMIOLOGY PROGRAM
1317 WINEWOOD BOULEVARD
TALLAHASSEE, FLORIDA 32399-0700**

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INTRODUCTION

This is the 44th edition of the Florida Morbidity Statistics. The series began in 1945 in order to provide a variety of users with detailed information not previously available in the State Board of Health Annual Reports. Data on the reported incidence of notifiable communicable diseases are presented in a table and figure format with narrative interpretations when appropriate. These and some unpublished records for the years 1918 through 1944 are available upon request from the Florida Department of Health and Rehabilitative Services (HRS), State Health Office Epidemiology Program.

Sources of Data

Data in this document are based on case reports furnished to HRS County Public Health Units by private physicians, hospitals, and others. Additional sources of data include death certificates and laboratory reports which are checked routinely for unreported cases of notifiable diseases.

Each HRS County Public Health Unit designates an individual responsible for collecting, tabulation, and maintaining data on reportable notifiable diseases received from physicians and hospitals on a continuing basis. These data are initially recorded on a "Reportable Disease Control Log". From this log each HRS County Public Health Unit prepares and submits to the District Administrator and State Health Office Epidemiology Program, summary reports on all cases of notifiable diseases reported during the past seven days. On the basis of these morbidity data received from HRS County Public Health Units, the Epidemiology Program compiles statewide statistics and makes a weekly report of certain prescribed diseases to the Centers for Disease Control (CDC).

The population figures used in calculating the case rates for certain diseases are furnished by the Office of Planning and Budgeting, Executive Office of the Governor.

Epidemiologic Investigation

Individual case reports are verified as cases of reportable disease through investigations conducted by HRS County Public Health Unit personnel. The HRS County Public Health Unit director assigns those cases to be investigated to a nurse, environmental health specialist, or other appropriate personnel for follow-up. Most cases are physician-diagnosed and have appropriate laboratory verification. Individual case investigation forms are then forwarded to the State Health Office Epidemiology Program for review and, in some instances, forwarded to the CDC along with investigation reports from any outbreaks.

Report Orientation

Occurrence of cases by county is usually reported by residence of the case. Reports originating from hospitals and other places outside the ill person's county of residence are credited to the county of usual residence. Sexually transmitted diseases are reported by county of residence unless residing in an institution (i.e., prison) in which case they are attributed to the institutional category (68).

Computerized Data Base

The Epidemiology Program collects the data submitted and compiles it for analysis and interpretation. The data are also forwarded to the HRS Data Center for further electronic data processing. The CDC is then notified electronically of reports on selected communicable disease.

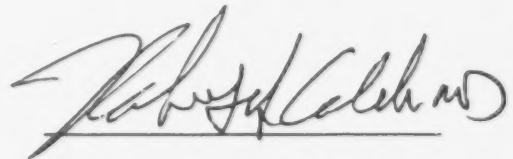
ACKNOWLEDGEMENTS

The Epidemiology Program acknowledges the important role played by Charles Hartwig, Sc.D., Director of Laboratory Services, and his staff in the Central Laboratory, the Epidemiology Research Center, and the six branch laboratories, in the prevention and control of communicable diseases. Other HRS units which contribute substantially to this overall effort are the Office of Vital Statistics and the Office of Management Systems.

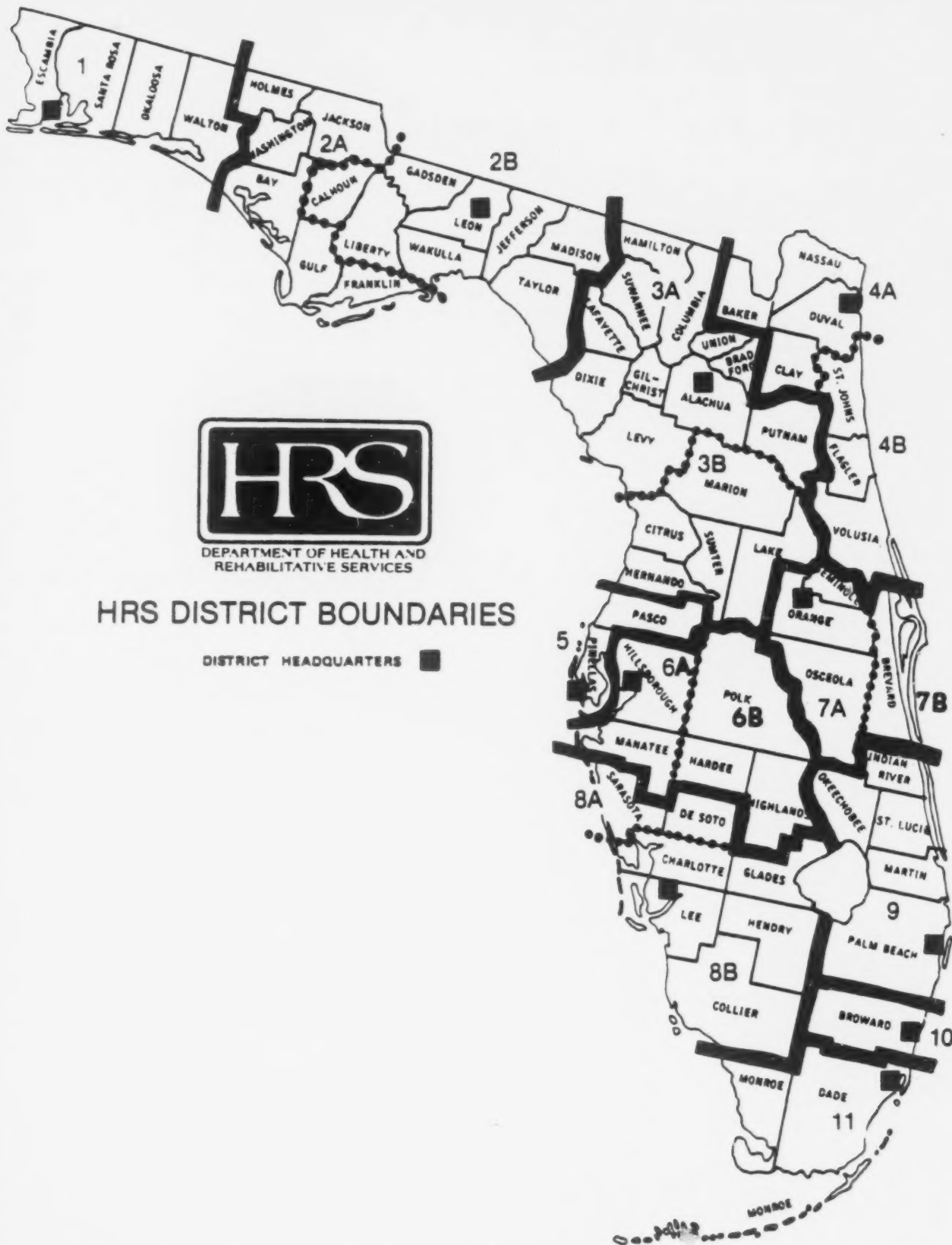
Special thanks to employees in the HRS Sexually Transmitted Disease, Tuberculosis, Immunization, and AIDS Programs for their efforts in the prevention, surveillance, and control of communicable disease, specifically Jack Wroten, Chief, Sexually Transmitted Diseases Program, William J. Bigler, Ph.D., Chief, Tuberculosis Control Program, Henry T. Janowski, M.P.H., Chief, Immunization Program, and Joyner Sims, Ph.D., Chief, AIDS Program.

Laura MacLafferty, Program Specialist, and Kirk Hudson, Research Assistant, Communicable Disease Program are thanked especially for their assistance in producing all graphic materials in this report.

Further acknowledgement is made to HRS Districts and County Public Health Units for their collective efforts in the statewide communicable diseases morbidity surveillance and reporting system. The participation of physicians, hospitals, nurses, environmental health specialists, infection control nurses, epidemiology/communicable disease specialists, communicable disease report persons, and clerical staff is likewise greatly appreciated.

A handwritten signature in dark ink, appearing to read "Robert A. Calder", with a stylized flourish at the end.

Robert A. Calder, M.D., M.S.
State Epidemiologist



**ALPHABETICAL LIST OF FLORIDA COUNTIES WITH
1988 MIDYEAR POPULATION ESTIMATES AND DISTRICT NUMBERS**

<u>COUNTY</u>	<u>POPULATION</u>	<u>DISTRICT</u>
ALACHUA	184,765	3
BAKER	18,962	4
BAY	136,027	2
BRADFORD	24,753	3
BREVARD	390,261	7
BROWARD	1,208,158	10
CALHOUN	9,805	2
CHARLOTTE	93,825	8
CITRUS	86,871	3
CLAY	101,309	4
COLLIER	133,888	8
COLUMBIA	42,601	3
DADE	1,829,305	11
DESOTO	23,546	8
DIXIE	10,118	3
DUVAL	684,161	4
ESCAMBIA	287,030	1
FLAGLER	20,860	4
FRANKLIN	8,675	2
GADSDEN	47,022	2
GILCHRIST	7,203	3
GLADES	7,583	8
GULF	12,305	2
HAMILTON	9,485	3
HARDEE	22,557	6
HENDRY	25,521	8
HERNANDO	86,706	3
HIGHLANDS	66,438	6
HILLSBOROUGH	832,209	6
HOLMES	16,493	2
INDIAN RIVER	87,703	9
JACKSON	44,680	2
JEFFERSON	12,124	2
LAFAYETTE	5,126	3
LAKE	143,596	3
LEE	310,698	8
LEON	181,608	2
LEVY	24,429	3
LIBERTY	5,114	2
MADISON	16,022	2
MANATEE	187,274	6
MARION	184,696	3
MARTIN	93,326	9
MONROE	76,702	11
NASSAU	46,149	4
OKALOOSA	156,982	1
OKEECHOBEE	29,060	9
ORANGE	630,576	7
OSCEOLA	94,966	7
PALM BEACH	827,891	9
PASCO	265,469	5
PINELLAS	845,885	5
POLK	401,420	6
PUTNAM	64,852	3
ST. JOHNS	79,744	4
ST. LUCIE	135,353	9
SANTA ROSA	68,067	1
SARASOTA	260,134	8
SEMINOLE	270,153	7
SUMTER	30,274	3
SUWANNEE	26,785	3
TAYLOR	19,132	2
UNION	11,019	3
VOLUSIA	344,477	4
WAKULLA	14,340	2
WALTON	28,814	1
WASHINGTON	15,518	2
STATE TOTAL*	12,468,600	

*State population increased 2.94 percent from 1987.

Population figures based on data furnished by Office of Planning and Budgeting, Executive Office of the Governor.

SECTION 1:

Summary of
Selected Notifiable
Diseases

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, FLORIDA, 1988

DISEASES	Totals	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
Amebiasis	55	2	1	2	0	4	0	6	1	4	3	2	4	26
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	46	1	4	3	4	3	7	4	4	3	4	4	2	3
Hepatitis A	742	47	43	44	31	55	52	77	62	65	66	76	81	43
Hepatitis B	1480	93	104	96	90	104	105	114	115	103	105	117	83	251
Hepatitis NANB Asso. w/Blood or Blood Products	40	3	4	2	3	5	5	4	2	4	1	3	1	3
Hepatitis NANB Not Asso. w/Blood/Blood Products	92	2	10	7	9	11	6	7	9	8	6	3	4	10
Hepatitis, Unspecified	76	8	5	6	3	7	5	5	2	4	3	13	5	10
Legionnaires' Disease	17	0	3	2	2	0	1	0	1	1	3	2	2	0
Malaria	39	2	2	2	2	2	4	3	7	4	1	1	5	4
Measles (Rubeola)	170	38	34	16	4	1	11	36	23	7	0	0	0	0
Meningitis, Aseptic	618	44	33	38	35	54	69	57	63	58	57	59	43	8
Meningitis, Haemophilus Influenzae	439	41	33	51	36	42	17	30	28	29	39	46	40	7
Meningitis, Meningococcal	122	13	16	14	11	10	13	5	7	4	10	8	9	2
Meningitis, Other Bacterial	294	37	16	27	21	25	18	24	23	16	20	27	29	11
Mumps	43	3	6	3	3	4	3	0	3	6	0	5	6	1
Pertussis	72	4	2	5	6	6	8	13	7	3	3	7	8	0
Rubella (Excluding Congenital)	3	0	1	0	2	0	0	0	0	0	0	0	0	0
Salmonellosis	2435	139	92	127	123	167	203	291	286	335	251	152	136	133
Shigellosis	1995	61	75	62	79	114	209	202	236	252	235	171	207	92

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES, FLORIDA, 1979-1988

DISEASES	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	46	47	43	63	77	80	98	69	80	67
Hepatitis A	742	729	1268	1028	779	961	1123	1509	2278	1883
Hepatitis B	1480	1563	1659	1728	1593	1398	1356	1512	1222	981
Hepatitis NANB Asso. w/Blood or Blood Products	40	57	72	106	98	56	75	74	51	82
Hepatitis NANB Not Asso. w/Blood/Blood Products	92	98	171	250	243	196	183	105	+	+
Hepatitis, Unspecified	76	100	172	291	248	295	477	530	788	741
Gonorrhea	60714	62944	67443	57647	51212	53370	62702	60354	65437	61427
Legionnaires' Disease	17	27	38	20	13	23	28	22	12	47
Malaria	39	39	49	38	33	31	35	49	86	32
Measles (Rubeola)	170	126	400	117	30	159	246	345	432	938
Meningitis, Aseptic	618	665	713	592	487	588	873	673	654	319
Meningitis, Haemophilus Influenzae	439	420	396	423	408	333	337	N/A	N/A	N/A
Meningitis, Meningococcal	122	117	102	108	150	124	147	256	218	203
Meningitis, Other Bacterial	294	334	345	301	360	325	667	551	487	424
Mumps	43	67	62	61	47	26	48	145	195	216
Pertussis	72	53	82	75	91	57	59	78	68	51
Rubella (Excluding Congenital)	3	10	12	30	28	70	32	67	109	318
Salmonellosis	2435	2960	3160	2513	1859	2332	2637	2194	2031	1853
Shigellosis	1995	818	800	1317	1032	700	585	784	927	808
Syphilis (All Stages)	19265	15666	9427	7969	8314	8404	7936	5971	4384	4567
Tuberculosis	1667	1586	1478	1425	1335	1457	1467	1553	1647	1628
Typhoid Fever	19	16	10	20	18	19	21	27	16	23

N/A Data Not Available

+Not Reported This Year

REPORTED CASE RATES PER 100,000 POPULATION FOR SELECTED NOTIFIABLE DISEASES, FLORIDA, 1979-1988

DISEASES	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	0.4	0.4	0.4	0.5	0.7	0.8	0.9	0.7	0.8	0.7
Hepatitis A	6.0	6.0	10.8	9.0	7.1	9.0	10.6	14.8	23.2	20.3
Hepatitis B	11.9	12.9	14.1	15.2	14.5	13.1	12.8	14.8	12.5	10.6
Hepatitis NANB Asso. w/Blood or Blood Products	0.3	0.5	0.6	0.9	0.9	0.5	0.7	0.7	0.5	0.9
Hepatitis NANB Not Asso. w/Blood/Blood Products	0.7	0.8	1.5	2.2	2.2	1.8	1.7	1.0	+	+
Hepatitis, Unspecified	0.6	0.8	1.5	2.6	2.3	2.8	4.5	5.2	8.0	8.0
Gonorrhea	486.9	519.6	574.2	506.7	465.0	501.7	595.7	597.0	666.8	660.9
Legionnaires' Disease	0.1	0.2	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.5
Malaria	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.9	0.3
Measles (Rubeola)	1.4	1.0	3.4	1.0	0.3	1.5	2.3	3.4	4.4	10.1
Meningitis, Aseptic	5.0	5.5	6.1	5.2	4.4	5.5	8.3	6.6	6.7	3.4
Meningitis, Haemophilus Influenzae	3.5	3.5	3.4	3.7	3.7	3.1	3.2	N/A	N/A	N/A
Meningitis, Meningococcal	1.0	1.0	0.9	1.0	1.4	1.2	1.4	2.5	2.2	2.2
Meningitis, Other Bacterial	2.4	2.8	2.9	2.7	3.3	3.1	6.3	5.4	5.0	4.6
Mumps	0.3	0.6	0.5	0.5	0.4	0.2	0.5	1.4	2.0	2.3
Pertussis	0.6	0.4	0.7	0.7	0.8	0.5	0.6	0.8	0.7	0.5
Rubella (Excluding Congenital)	0.02	0.1	0.1	0.3	0.3	0.7	0.3	0.7	1.1	3.4
Salmonellosis	19.5	24.4	26.9	22.1	16.9	21.9	25.0	21.5	20.7	19.9
Shigellosis	16.0	6.8	6.8	11.6	9.4	6.6	5.5	7.7	9.4	8.7
Syphilis (All Stages)	154.5	129.3	80.3	70.0	75.5	79.0	75.2	59.1	44.7	49.1
Tuberculosis	13.5	13.2	12.7	12.5	12.2	13.6	13.9	15.3	16.9	18.4
Typhoid Fever	0.2	0.1	0.1	0.2	0.2	0.2	0.6	0.3	0.2	0.2

*Not Reported This Year

N/A Data Not Available

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA, 1979 - 1988

DISEASE	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	Not Reported Prior to
Botulism	1	3	0	0	0	0	1	1	0	0	1961
Brucellosis	5	9	7	8	13	7	10	16	7	11	
Cholera (Group 01)	0	0	1	1	0	0	1	0	0	0	
Congenital Rubella	0	0	0	0	0	0	0	1	2	4	1971
Dengue	0	2	1	0	0	0	1	13	1	0	
Diphtheria	0	0	0	0	0	0	0	1	0	0	
Histoplasmosis	1	4	0	6	3	2	3	2	1	4	1957
Hansen's Disease (Leprosy)	1	2	3	4	8	8	8	1	4	9	
Leptospirosis	1	0	1	4	2	4	8	6	11	18	1950
Polio	0	0	2	1	0	0	0	0	0	0	
Psittacosis	1	2	3	14	3	3	1	3	5	0	1954
Reye Syndrome	2	2	5	2	6	13	9	18	21	13	
Rocky Mt. Spotted Fever	5	4	2	15	2	3	5	14	9	10	1947
Schistosomiasis	2	0	2	2	3	10	3	2	3	1	
Tetanus	4	4	3	10	7	4	2	5	4	8	
Toxoplasmosis	8	4	8	12	5	11	22	25	32	6	1964
Tularemia	0	0	0	0	0	0	1	1	0	0	
Typhus Fever (Murine)	1	0	2	0	0	0	2	1	0	1	1946

*Other Diseases of Infrequent Occurrence and Year Last Case Reported

Anthrax (1974)

Human Rabies (1948)

Smallpox (1946)

SECTION 2:

Analysis of Selected Notifiable Diseases



ENCEPHALITIS, POST-INFECTIOUS AND OTHER

In 1988, there were 46 cases of encephalitis, post-infectious and other (excluding arthropod-borne) reported in Florida, a slight decrease from 1987 when 47 cases were reported. The overall incidence per 100,000 for the state population remained the same as last year (0.4).

These encephalitis cases were reported from 20 of Florida's 67 counties. The number of cases, by month of onset, indicates a peak during the month of June.

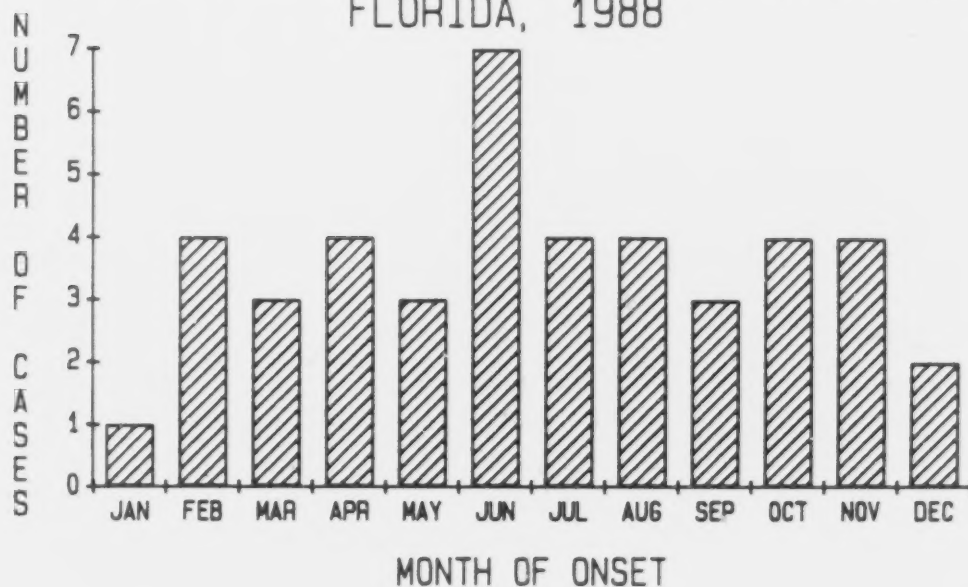
The highest age-specific incidence per 100,000 population was observed in those less than 1 year old (2 cases, 1.1 per 100,000). The low incidence in age groups 1-4 and above remained fairly constant.

ENCEPHALITIS, POST-INFECTIONOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) -
REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

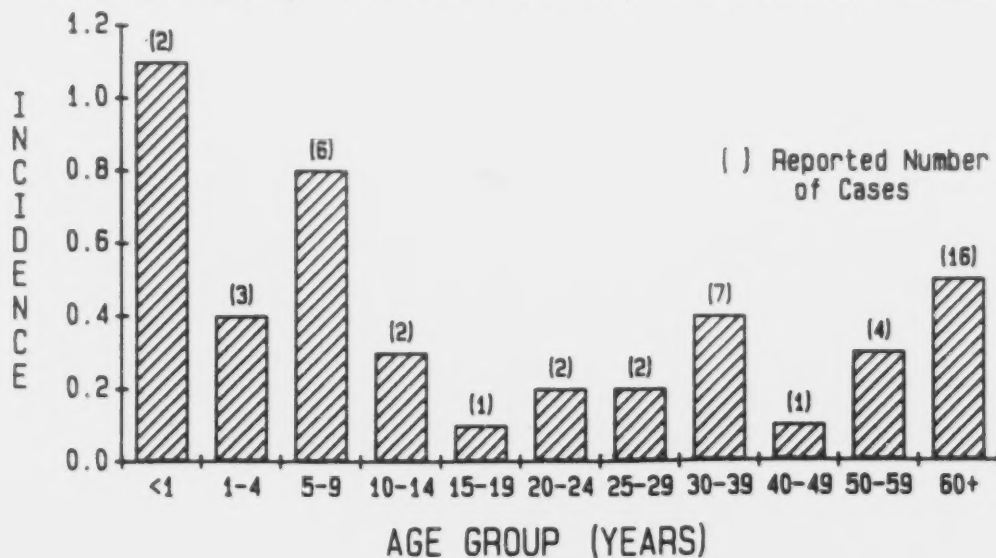
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.1
	Okaloosa					1									1	0.6	1.1
	Santa Rosa															0.0	1.0
	Walton															0.0	1.2
II	Bay															0.0	2.4
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden		1				1								2	4.3	0.7
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	2.4
	Jefferson															0.0	0.0
	Leon							1		1				1	3	1.7	0.6
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	1.8
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua				1										1	0.5	0.4
	Bradford								1						1	4.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	1.6
	Dixie															0.0	0.0
	Glachrist															0.0	0.0
	Hamilton															0.0	3.6
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.2
	Levy															0.0	1.4
	Marion									1		1			2	1.1	0.8
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	6.1
IV	Baker						1					1			2	10.5	0.0
	Clay															0.0	1.5
	Duval															0.0	0.4
	Flagler															0.0	0.0
	Nassau															0.0	2.4
	St Johns															0.0	0.9
V	Volusia															0.0	0.0
	Pasco				1										1	0.4	0.4
VI	Pinellas								1						1	0.1	0.2
	Hardee															0.0	0.0
VII	Highlands															0.0	0.0
	Hillsborough				1										1	0.1	0.1
	Manatee															0.0	0.4
	Polk		2				1	1			1		1		6	1.6	1.4
VIII	Brevard															0.0	0.1
	Orange		1					1							2	0.3	0.7
	Osceola															0.0	0.4
	Seminole			1							1	1			3	1.1	0.4
IX	Charlotte															0.0	1.2
	Collier					1	1				2				4	3.0	0.0
	DeSoto													1	1	4.2	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee				1					1					2	0.6	0.3
	Sarasota						1		1			1			3	1.2	0.8
	Indian River															0.0	1.6
X	Martin						1								1	1.1	0.4
	Okeechobee															0.0	0.0
	Palm Beach			2		1	1	1	1				1		7	0.8	0.6
	St Lucie															0.0	0.3
	Broward	1													1	0.2	0.5
XI	Dade															0.0	0.0
	Monroe															0.0	0.0
STATE TOTAL		1	4	3	4	3	7	4	4	3	4	4	2	3	46	0.4	0.4

*1985-1987 Average rate

ENCEPHALITIS, POST-INFECTIOUS AND OTHER
REPORTED CASES BY MONTH OF ONSET,
FLORIDA, 1988



ENCEPHALITIS, POST-INFECTIOUS AND OTHER
REPORTED INCIDENCE PER 100,000
POPULATION, BY AGE GROUP, FLORIDA, 1988



ENCEPHALITIS, ARTHROPOD-BORNE

Eastern Equine Encephalitis (EEE)

In 1988, there was one human case of EEE in Florida. The victim was a 44 year old white male from Bradenton, Florida (Manatee County). He was admitted to Manatee Memorial Hospital on June 25 with fever, headache, stiff neck, confusion, disorientation, and hyperreflexia. Paired serum specimens revealed an S_1 of 1:40 and an S_2 of 1:2560 for Eastern Equine encephalitis. The man recovered with no residual sequelae.

St. Louis Encephalitis (SLE)

There were no human cases of SLE in Florida in 1988.

Arbovirus Surveillance

During 1988 a total of 7,579 sentinel chicken sera from 25 counties were tested for hemagglutination (HI) antibodies to EEE and SLE virus by the HRS Epidemiology Research Center in Tampa. Most of these sera were collected during the summer and fall when the EEE and SLE virus are most active. EEE virus activity during the season was identified in 12 counties (Bay, Leon, Putnam, Duval, Nassau, Volusia, Pasco, Orange, Seminole, Glades/Hendry, and Martin). EEE activity in 1988 continued through December, well beyond the usual May - August period.

SLE virus activity was identified via seroconversions in three counties (Collier, Lee and Martin). The reported SLE activity in sentinel chicken flocks around the state was minimal in 1988. No county this year experienced an 80% monitor flock seroconversion rate, consequently no epidemic alerts were issued.

MENINGITIS, ASEPTIC

In 1988, there were 618 cases of aseptic meningitis reported in Florida, a decrease from 1987 when 665 cases were reported. The overall state incidence per 100,000 population decreased from 5.5 per 100,000 in 1987 to 5.0 per 100,000 in 1988.

Aseptic meningitis cases were reported from all but 25 of Florida's 67 counties. The major population centers in the state accounted for most of the cases. Enteroviruses, which accounted for the majority of culture confirmed cases, are identified in most areas of the state.

The highest age-specific incidence rate per 100,000 population was in the less than 1 year old age group (167 cases, 94.0 per 100,000). The case rate then decreased rapidly with increasing age. The slightly elevated case rate in the age groups 1-4, 5-9, 20-24 and 25-29 may represent familial and parental associations with infants and young children.

3

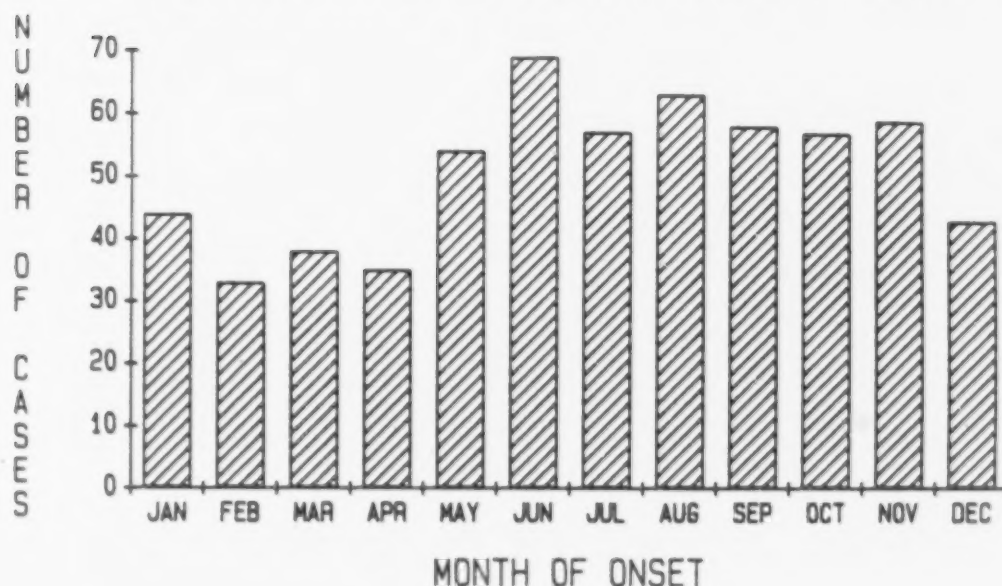
3

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1988

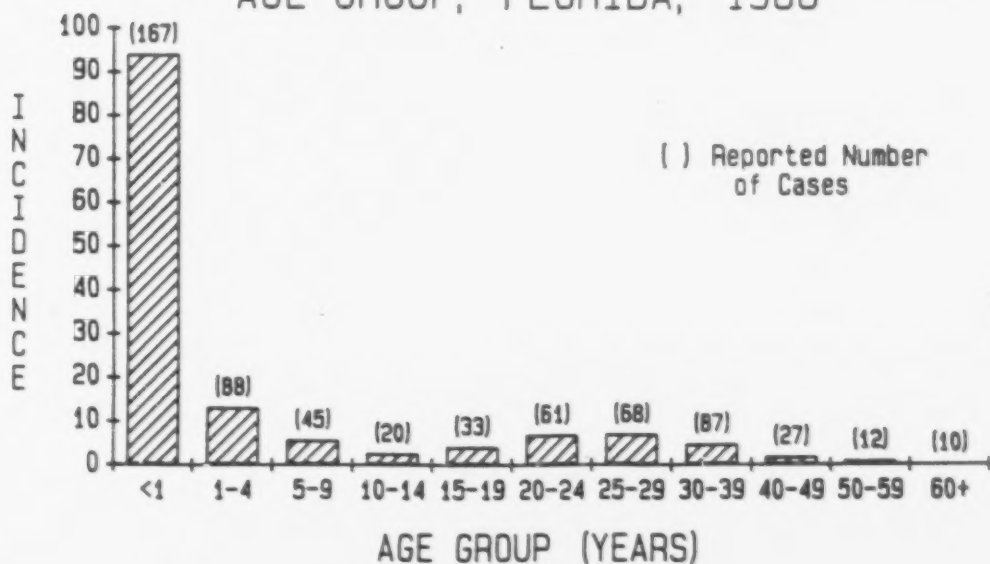
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia		2												2	0.7	1.7
	Okaloosa				1										1	0.6	1.1
	Santa Rosa									1					1	1.5	4.6
	Walton															0.0	3.7
II	Bay						1								1	0.7	1.3
	Calhoun															0.0	0.0
	Franklin															0.0	3.9
	Gadsden					1									1	2.1	2.9
	Gulf															0.0	0.0
	Holmes				1										1	6.1	0.0
	Jackson	1													1	2.2	11.1
	Jefferson															0.0	0.0
	Leon	1				3	1		4	2	1	1			13	7.2	9.2
	Liberty															0.0	7.3
	Madison															0.0	0.0
	Taylor										1				1	5.2	9.1
	Wakulla															0.0	7.2
	Washington															0.0	0.0
III	Alachua	1	2	1	3			1	2		2		1		13	7.0	9.1
	Bradford															0.0	0.0
	Citrus	2								1					3	3.5	0.9
	Columbia									1	2				3	7.0	1.6
	Dixie															0.0	3.5
	Gilchrist															0.0	4.6
	Hamilton															0.0	0.0
	Hernando		1								1		2		4	4.6	4.5
	Lafayette															0.0	0.0
	Lake					1							1		2	1.4	1.0
	Levy															0.0	1.4
	Marion		1		3	3	3	2	1	3	2	1	2	6	27	14.6	7.3
	Putnam															0.0	1.1
	Sumter						1								1	3.3	0.0
	Suwannee									1					1	3.7	0.0
	Union															0.0	6.1
IV	Baker															0.0	0.0
	Clay	1				1	1			1	1		1		6	5.9	9.2
	Duval				1	3	5	4	2	2	2	3			23	3.4	0.3
	Flagler															0.0	1.9
	Nassau										2	1			3	6.5	3.2
	St. Johns										1				1	1.3	6.7
	Volusia							1			2				3	0.9	5.2
V	Pasco				1	1		2	2	1	1	1			9	3.4	4.9
	Pinellas	3	2	1	1	1	3	2	4	3	2		3		25	3.0	3.9
VI	Hardee															0.0	6.1
	Highlands							2							2	3.0	4.4
	Hillsborough	5	3	4	2	8	5	5	3	4		2	4		45	5.4	9.1
	Manatee						2					2			5	2.7	6.6
	Polk	3	4	2	4	6	9	6	2	1	4	1	2		44	11.0	11.3
	Brevard		2	1		2		2			2				10	2.6	7.3
VII	Orange	2		2	1	1	7	4	9	8	8	15			59	9.4	11.2
	Osceola							1							1	1.1	3.1
	Seminole	4				2	2	4	3	2		1			18	6.7	5.8
VIII	Charlotte															0.0	1.6
	Collier				1			1	1	2	2	3	4		14	10.5	8.1
	DeSoto															0.0	3.0
	Glades															0.0	0.0
	Hendry															0.0	2.8
	Lee	1	4	3		2		3	2	1	2	6			24	7.7	11.6
	Sarasota	6		1			4		2						15	5.8	2.3
IX	Indian River	1							1	1			1		4	4.6	5.8
	Martin					1	1	1	1	2			1		7	7.5	11.7
	Okeechobee															0.0	1.3
	Palm Beach	3	4	6	2	7	9	8	6	7	3	1	4		60	7.2	6.7
	St. Lucie			1							2		1		4	3.0	8.3
X	Broward	5	4	3	5	3	5	1	6	3	4	5	2		46	3.8	4.4
XI	Dade	5	4	13	9	7	10	7	12	10	10	16	8	2	113	6.2	4.9
	Monroe					1									1	1.3	0.9
STATE TOTAL		44	33	38	35	54	69	57	63	58	57	59	43	8	618	5.0	5.6

*1985-1987 Average rate

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



MENINGITIS, ASEPTIC - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



MENINGITIS, HAEMOPHILUS INFLUENZAE

In 1988, there were 439 cases of Haemophilus influenzae meningitis reported in Florida, a slight increase from 1987, when 420 cases were reported. However, the overall incidence for the state did not change from 1987 to 1988 (3.5 per 100,000).

Meningitis cases were reported from 48 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The number of cases by month of onset showed lower incidence during the warmer months (June through September).

The peak age-specific incidence of reported cases occurred in the less than 1 year olds (105 cases, 59.1 per 100,000), followed by the 1-4 year olds (299 cases, 44.7 per 100,000). These two age groups accounted for 92% of the total cases. The low incidence in age groups 5-9 and above remained fairly constant.

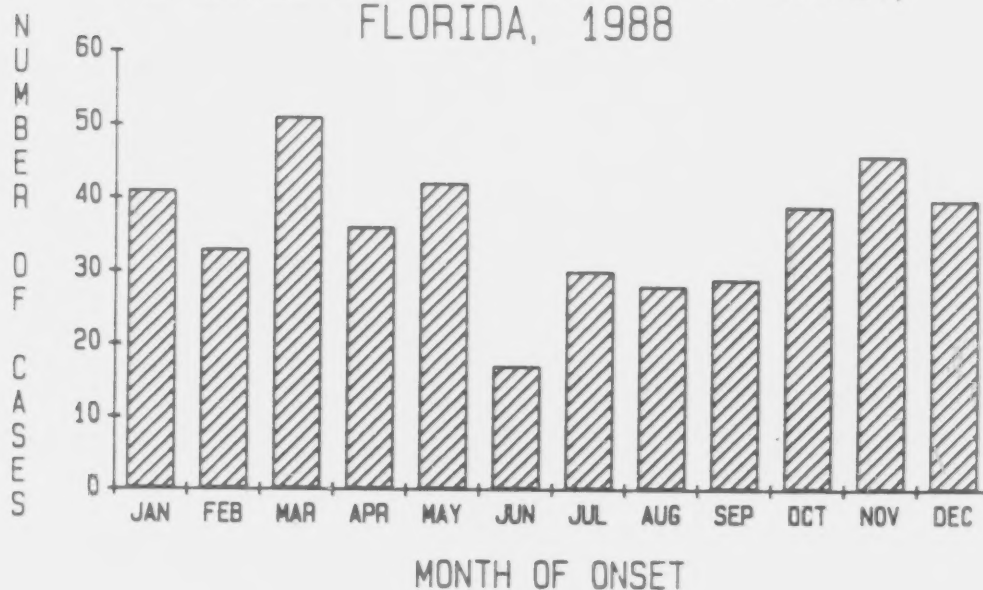
MENINGITIS, *HAEMOPHILUS INFLUENZAE* - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000

POPULATION, BY COUNTY, FLORIDA, 1988

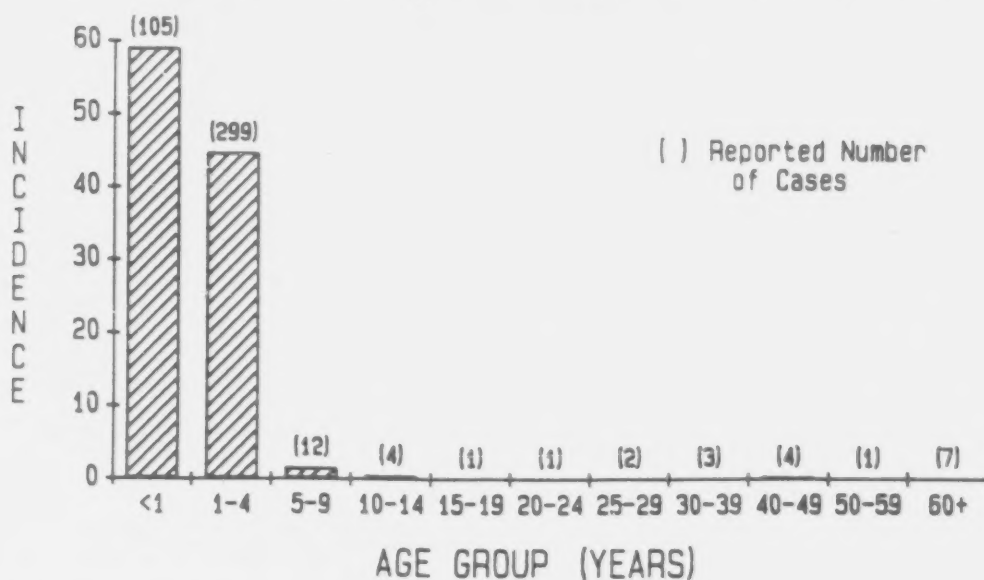
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN *
I	Escambia					1			1	1	2		2		7	2.4	2.8
	Okaloosa								1	1	2				4	2.5	5.1
	Santa Rosa					1				1	1				3	4.4	2.5
	Walton															0.0	3.7
II	Bay	1		2	1	2									6	4.4	4.7
	Calhoun															0.0	3.4
	Franklin															0.0	0.0
	Gadsden	1	2		1	1	1	1				1			8	17.0	11.6
	Gulf															0.0	2.9
	Holmes															0.0	0.0
	Jackson															0.0	1.6
	Jefferson															0.0	0.0
	Leon					2				3		1	2	6	14	7.7	4.6
	Liberty															0.0	0.0
	Madison								1		1	1			3	18.7	2.1
	Taylor		1						1						2	10.5	3.6
	Wakulla															0.0	9.6
	Washington															0.0	0.0
III	Alachua			2	1	1					1				5	2.7	3.7
	Bradford								1						1	4.0	1.4
	Citrus															0.0	1.7
	Columbia		1		1							1			3	7.0	5.7
	Dixie											1			1	9.9	0.0
	Glachrist		1									1			2	27.8	4.6
	Hamilton					1									1	10.5	0.0
	Hernando				1				1						2	2.3	0.9
	Lafayette															0.0	7.2
	Lake	2		2											4	2.8	3.6
	Levy			1									2		3	12.3	1.4
	Marion	1		2		1		1			1		1		7	3.8	5.9
	Putnam	1				1						2			4	6.2	4.0
	Sumter								1						1	3.3	3.5
	Suwannee			1											1	3.7	0.0
	Union															0.0	6.1
IV	Baker															0.0	3.7
	Clay									1	1	1			3	3.0	2.6
	Duval	2	2	5		5	1	1	4	2	4	3	5		34	5.0	5.7
	Flagler															0.0	3.8
	Nassau		1									1			2	4.3	7.1
	St Johns							1							1	1.3	4.0
	Volusia		1		2	1	2	1					1		8	2.3	2.6
V	Pasco			1					1			2	1		5	1.9	2.3
	Pinellas	5		1	1			1				3			11	1.3	2.2
VI	Hardee															0.0	3.1
	Highlands	1				1	1	1							4	6.0	1.1
	Hillsborough	2	1	4	2	2	1	2	2		6	2	2		26	3.1	2.6
	Manatee	2					1	1							4	2.1	2.6
	Polk	1	4	2	1	1				1	2	1			13	3.2	3.2
VII	Brevard		2	1		2	1				2	2			12	3.1	2.3
	Orange	2	1	4		4		1	4	3	1	1	3		24	3.8	4.8
	Osceola		1	1		3			1	2					8	8.4	4.3
	Seminole	2	1		2	2		1	1		1				10	3.7	2.6
	Charlotte				1										1	1.1	1.2
VIII	Collier	1			1	2					1		1		6	4.5	6.2
	DeSoto	1													2	8.5	6.0
	Glades															0.0	0.0
	Hendry								1				1		2	7.8	4.2
	Lee			2	1					1	1	1		1	7	2.3	4.4
	Sarasota															0.0	2.4
	Indian River											1	2		3	3.4	2.5
IX	Martin				1			2				2			5	5.4	4.7
	Okeechobee	1				1						1	2		5	17.2	5.1
	Palm Beach	3		1	2	2	1	2		1	2				17	2.1	4.2
	St Lucie	1	2	3							1				7	5.2	1.9
	X Broward	3	2	3	7	3	1	4		7	3	7	5		45	3.7	2.5
XI	Dade	8	7	13	10	2	7	10	7	5	6	10	7		92	5.0	4.3
	Monroe															0.0	2.7
STATE TOTAL		41	33	51	36	42	17	30	28	29	39	46	40	7	439	3.5	3.5

*1985-1987 Average rate

MENINGITIS, HAEMOPHILUS INFLUENZAE
REPORTED CASES BY MONTH OF ONSET,
FLORIDA, 1988



MENINGITIS, HAEMOPHILUS INFLUENZAE
REPORTED INCIDENCE PER 100,000
POPULATION, BY AGE GROUP, FLORIDA, 1988



MENINGITIS, MENINGOCOCCAL

In 1988, 122 cases of meningitis due to Neisseria meningitidis were reported. This was an incidence rate of 1.0 cases per 100,000 population, which did not change from the incidence rate reported in 1987. The peak age-specific incidence of reported cases occurred in the less than 1 year olds (23 cases, 12.9 per 100,000) followed by the 1-4 year olds (29 cases, 4.3 per 100,000). These two age groups represented 42.6% of the total cases. The incidence in the older age groups remained low and fairly constant.

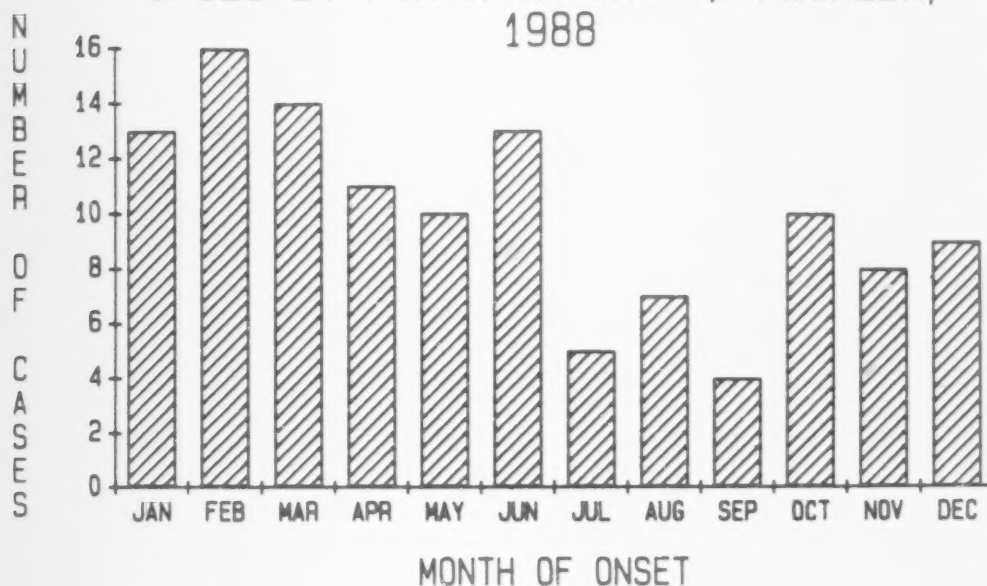
Meningococcal meningitis cases were reported from 29 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The majority of cases occurred in February (16) and March (14).

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION,
BY COUNTY, FLORIDA, 1988

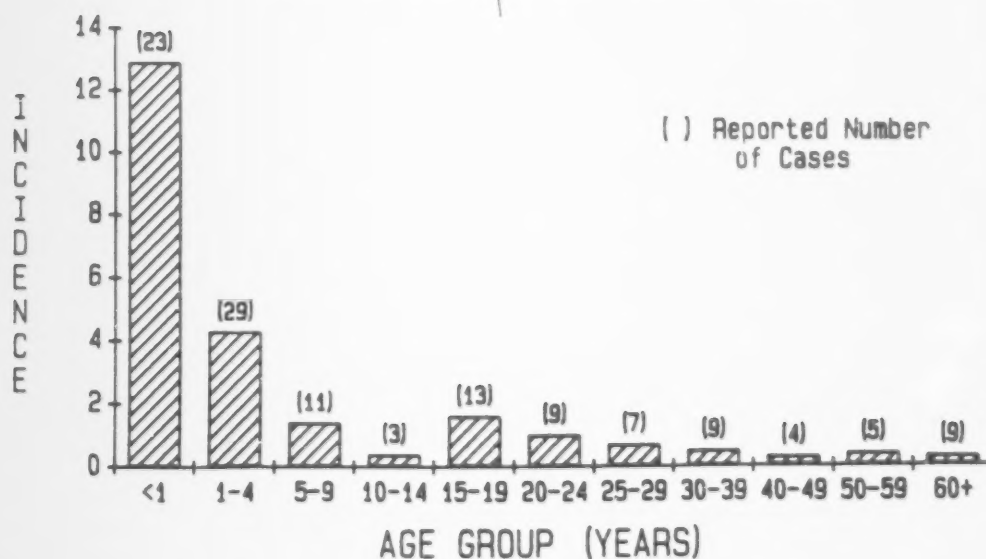
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.4
	Okaloosa															0.0	0.5
	Santa Rosa															0.0	0.5
	Walton															0.0	0.0
II	Bay		1												1	0.7	1.3
	Calhoun															0.0	3.5
	Franklin															0.0	0.0
	Gadsden															0.0	1.5
	Gulf															0.0	0.0
	Holmes															0.0	4.2
	Jackson															0.0	3.2
	Jefferson															0.0	0.0
	Leon													1	1	0.6	1.0
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor			1											1	5.2	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.9
	Bradford															0.0	1.4
	Citrus															0.0	0.4
	Columbia															0.0	0.0
	Dixie															0.0	3.5
	Gluchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	1.3
	Lafayette															0.0	0.0
	Lake	1				1									2	1.4	1.3
	Levy															0.0	0.0
	Marion				1										1	0.5	1.4
	Putnam															0.0	1.7
	Sumter															0.0	0.0
	Suwannee												1		1	3.3	1.2
	Union															0.0	0.0
IV	Baker								1						1	5.3	5.6
	Clay		2												3	3.0	1.1
	Duval		1	3	1		2		1	1		1			9	1.3	1.2
	Flagler															0.0	0.0
	Nassau															0.0	2.4
	St Johns					1		1							2	2.5	0.5
	Volusia					1							1		2	0.6	0.8
	V		1				1								2	0.8	1.4
VI	Hardee	1			2							1			5	0.6	0.9
	Highlands														1	4.4	3.1
VII	Hillsborough	2	1	2	1	2	2	1							11	1.3	1.2
	Manatee										1				1	0.5	2.4
	Polk		2			1									4	1.0	0.4
	Brevard		1				1							1	3	0.8	0.6
VIII	Orange		2	1			1		3		1	2			12	1.9	1.5
	Osceola															0.0	0.8
	Seminole															0.0	0.3
	Charlotte															0.0	0.8
	Collier			1											2	1.5	0.5
IX	DeSoto															0.0	1.5
	Glades															0.0	0.0
	Hendry				1										1	3.9	1.4
	Lee	3		1			1								5	1.6	0.5
	Sarasota		1			2				1					4	1.5	1.2
	Indian River										1				1	1.1	0.8
X	Martin															0.0	0.4
	Okeechobee															0.0	0.0
	Palm Beach	3	2	1	1	2		1			2		2		14	1.7	1.0
	St Lucie		2												2	1.5	0.2
XI	Broward	2	1	2	2					1	2	1			11	0.9	0.2
	Dade	1	1		1	1	4	3	1	1	2	2			17	0.9	0.9
	Monroe				1										2	2.6	0.0
STATE TOTAL		13	16	14	11	10	13	5	7	4	10	8	9	2	122	1.0	0.9

*1985-1987 Average rate

MENINGITIS, MENINGOCOCCAL - REPORTED
CASES BY MONTH OF ONSET, FLORIDA,
1988



MENINGITIS, MENINGOCOCCAL - REPORTED
INCIDENCE PER 100,000 POPULATION, BY
AGE GROUP, FLORIDA, 1988



MENINGITIS, OTHER BACTERIAL

In 1988, 294 cases of meningitis, other bacterial [i.e., Group B streptococcus (38 cases), Listeria monocytogenes (11 cases), Streptococcus pneumoniae (74 cases), and other bacterial including Unspecified (171 cases)] were reported. This was an incidence of 2.4 cases per 100,000 population, a slight decrease from the incidence reported in 1987 (2.8). The peak age-specific incidence of reported cases occurred in the less than 1 year olds (75 cases, 42.2 per 100,000) followed by the 1-4 year olds (58 cases, 8.7 per 100,000). These two age groups represented 45.2% of the total cases reported. The incidence in age groups 5 years of age and above remained low and fairly constant.

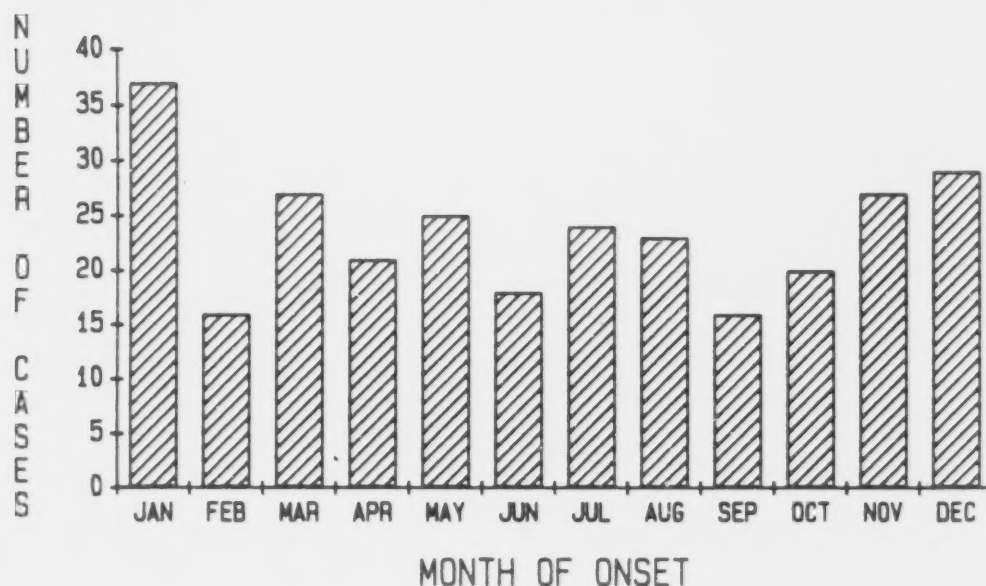
Bacterial meningitis (excluding Haemophilus influenzae and Neisseria meningitidis) cases were reported from 49 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. Most of the cases (although not necessarily the highest incidence) were accounted for by the major population centers in the state. Liberty County had the highest incidence with 39.1 cases per 100,000 population.

**MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION,
BY COUNTY, FLORIDA, 1988**

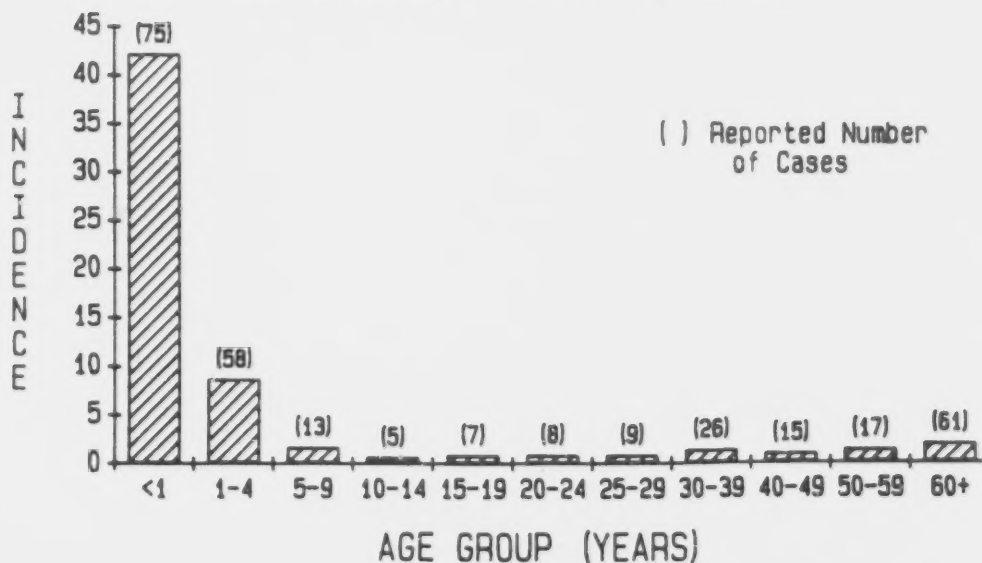
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia	1							1		1	1	1		5	1.7	1.9
	Okaloosa	1													1	0.6	0.5
	Santa Rosa				1									1	2	2.9	3.6
	Walton															0.0	3.7
II	Bay			1		1									2	1.5	1.6
	Calhoun															0.0	0.0
	Franklin															0.0	3.9
	Gadsden							2				2			4	8.5	8.7
	Gulf				1										1	8.1	2.9
	Holmes															0.0	2.1
	Jackson			1											1	4.5	0.8
	Jefferson				1										1	8.2	5.7
	Leon						1	1	1					2	5	2.8	12.6
	Liberty	1									1				2	39.1	7.3
	Madison										1				1	6.2	0.0
	Taylor															0.0	12.8
	Wakulla															0.0	2.4
	Washington															0.0	4.4
III	Alachua	1				2									3	1.6	3.0
	Bradford							1							1	4.0	11.1
	Citrus			1						2		1			4	4.6	5.1
	Columbia	1						3	2	1		1	1		9	21.1	7.4
	Dixie															0.0	0.0
	Glenn															0.0	4.6
	Hamilton		1												1	10.5	3.6
	Hernando		1				1						1		3	3.5	0.0
	Lafayette															0.0	0.0
	Lake	1			2	1	1	1	1				1		8	5.6	4.6
	Levy					1		1					1		3	12.3	4.3
	Marion	2		1						2	2	1	1		9	4.9	6.5
	Putnam	1	1	1		1									4	6.2	7.4
	Sumter															0.0	9.3
	Suwannee	1											1		2	7.5	1.3
	Union															0.0	3.1
IV	Baker		1												1	5.3	9.3
	Clay															0.0	1.1
	Duval	1					1		3			6	1		13	1.9	3.2
	Flagler															0.0	1.9
	Nassau				1										1	2.2	5.6
	St. Johns			1		3									4	5.0	1.8
	Volusia	2	1		2	2		1		1			2		11	3.2	2.8
	V	2		1			2					1			6	2.3	1.9
V	Pinellas	3						1	1				5		10	1.2	1.2
	VI	1				1									2	8.9	1.5
VI	Highlands															0.0	1.1
	Hillsborough	1		2	3	3		3	2	3	2		1		20	2.4	2.3
	Manatee											1			1	0.5	0.4
	Polk	5	1			1	1		1		3				13	3.2	3.8
VII	Brevard	1										3			5	1.3	1.7
	Orange	1		5	2		2		2	1		2			18	2.9	4.5
	Osceola				1		2								3	3.2	3.5
	Seminole	1	1	1	1	1	1		1						8	3.0	2.4
VIII	Charlotte		1	1											2	2.1	0.4
	Collier	1	1	1											4	3.0	6.8
	DeSoto			1											1	4.2	1.5
	Glades															0.0	0.0
	Hendry															0.0	4.2
	Lee		2	1					1	1		1			6	1.9	3.9
	Sarasota	1		1		3	2	2	1	1	1				12	4.6	5.6
	IX										1				1	1.1	7.0
IX	Indian River																
	Martin					1						1			2	2.1	2.7
	Okeechobee															0.0	2.5
	Palm Beach	1	1	2	3	4	3	3	2	2	2	1	3		27	3.3	2.7
	St. Lucie	2		1					2	1	2	1			9	6.6	4.0
X	Broward	2	1	1	1			3	1		1	2	1	4	17	1.4	2.0
XI	Dade	2	3	3	2		1	2	1		3	1	2	3	23	1.3	1.3
	Monroe														1	1.3	0.9
STATE TOTAL		37	16	27	21	25	18	24	23	16	20	27	29	11	294	2.4	2.8

*1985-1987 Average rate

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



MENINGITIS, OTHER BACTERIAL - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



HEPATITIS A

In 1988, 742 cases of hepatitis A were reported, as compared with 729 cases reported in 1987. The incidence in 1988 (6.0 per 100,000) indicated no change from the incidence in 1987.

The number of cases showed a slight decrease in April and then increased gradually through December. The largest number of cases were reported in December (81). The general trend may be due in part to community outbreaks of Hepatitis A in both Polk and Orange counties which began in May and September, respectively.

The bimodal distribution of cases among age groups was similar to previous years. Adults aged 25-29 years had the highest incidence of illness per 100,000 population (14.4) followed by children aged 5-9 years with an incidence of illness per 100,000 population of 11.9. There were no cases reported for children less than 1 year of age who, when infected, frequently have subclinical infection or non-specific mild illness and are probably underdiagnosed.

Hepatitis A infection was reported from all but 19 of Florida's 67 counties. The highest incidence of infection per 100,000 population was observed in DeSoto (46.7) and Collier (41.8) counties.

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY.

FLORIDA, 1988

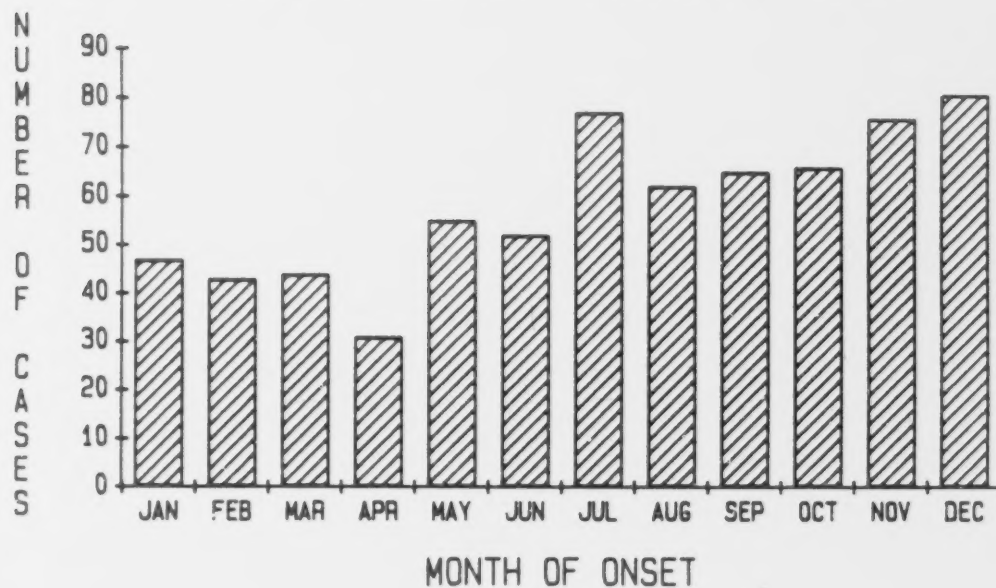
HEPATITIS A - REPORTED CASES

FLORIDA, 1988

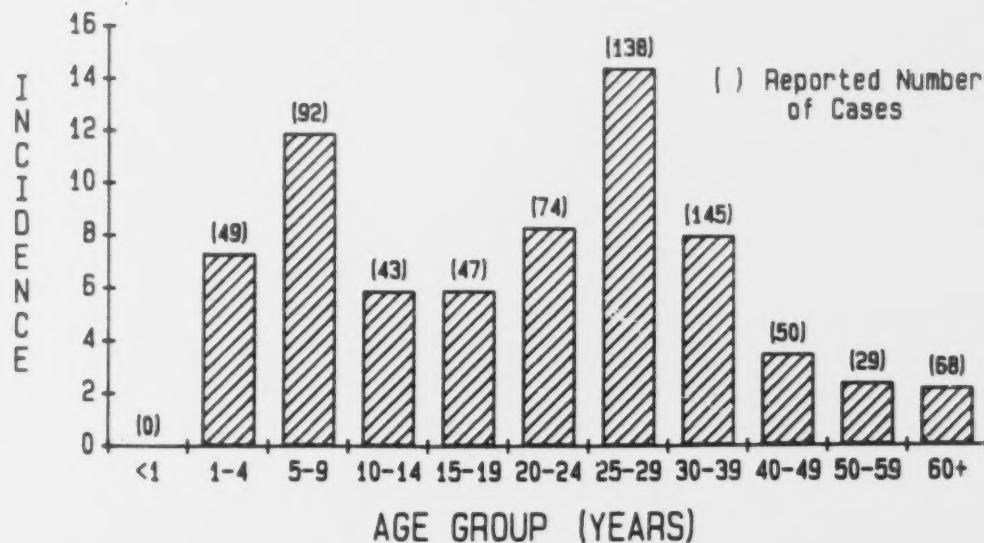
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN	
I	Escambia	2				1		1	2					2	7	2.4	5.7	
	Okaloosa	1								1					2	1.3	3.5	
	Santa Rosa						1		1							2.9	1.5	
	Walton															0.0	1.2	
II	Bay						1	8	4	1	1			1	16	11.8	1.1	
	Calhoun															0.0	0.0	
	Franklin															0.0	0.0	
	Gadsden					1	1	1							3	6.4	11.6	
	Gulf					1		3							4	32.5	0.0	
	Holmes															0.0	2.1	
	Jackson		1						1						2	4.5	2.4	
	Jefferson															0.0	0.0	
	Leon						1							1	2	1.1	3.1	
	Liberty															0.0	0.0	
	Madison														1	5.2	3.6	
	Taylor						1								1	7.0	4.8	
	Wakulla												1			0.0	8.8	
	Washington																	
III	Alachua							1			1	1			3	1.6	6.9	
	Bradford															0.0	5.5	
	Citrus				1			1		3	1	1		1	8	9.2	5.6	
	Columbia															0.0	0.0	
	Dixie															0.0	0.0	
	Gulchrist															0.0	0.0	
	Hamilton														1	1.2	6.2	
	Hernando	1														0.0	0.0	
	Lafayette																	
	Lake								1		1		2		4	2.8	12.0	
	Levy															0.0	2.9	
	Marion		1		1						1	5	2	1	11	6.0	10.9	
	Putnam												1		1	1.5	6.2	
	Sumter				1										1	3.3	5.8	
	Suwannee			1											1	3.7	3.8	
	Union															0.0	3.1	
IV	Baker						1		1	1					3	3.0	5.5	
	Clay																	
	Duval	6	6	2	3	6	5	7	4	10	6	9	12	1	76	11.1	12.7	
	Flagler									1					2	9.6	1.9	
	Nassau	1	1												2	4.3	10.3	
	St. Johns															0.0	29.2	
	Volusia				1	2	2		1	2	6	6	1	2	25	7.3	26.9	
V	Pasco	2							2	1	2		4		11	4.1	26.0	
	Pinellas	4	6	4			1	4	4	2	5	2	4		47	5.6	3.5	
VI	Hardee														2	8.9	15.3	
	Highlands	2		1	2				3	1		1			10	15.1	14.7	
	Hillsborough	1	1	2	3	5	1	2	2	2	5	7	5		36	4.3	15.3	
	Manatee	5			1	3	1	3	1	4	1	2	3	6	30	16.0	23.9	
	Polk	2	2	6	9	17	9	12	12	7	2	14	14	7	111	27.7	7.2	
VII	Brevard			1			2	3	13	9	3				38	9.7	2.7	
	Orange	4	4		2	1	3	1	4	9	18	21	15	2	84	13.3	13.7	
	Osceola	2	2	2											8	8.4	6.3	
	Seminole						1		2	1	2	2	3		11	4.1	6.8	
VIII	Charlotte														1	1.1	9.5	
	Collier	7	12	14	1	6	3	1	1			3		2	6	56	41.8	23.0
	DeSoto	6		1			2								2	11	46.7	22.4
	Glades															2	7.8	8.4
	Hendry										1					5	1.6	5.3
	Lee	1		1	1			1							9	3.5	12.2	
	Sarasota			3	2			1	1		2				1	6	6.8	1.6
IX	Indian River						2					1				1	1.1	19.5
	Martin															1	3.4	14.0
	Okeechobee																	
	Palm Beach	1	2		1						1		2	1	2	10	1.2	5.3
	St. Lucie																	
X	Broward				4	1	3	8	2	2	4	4	2	4	34	2.8	7.0	
XI	Dade			3	1	1		4	2	1	1	3	1	7	25	1.4	3.2	
	Monroe			1				1							2	2.6	3.6	
STATE TOTAL		47	43	44	31	55	52	77	62	65	66	76	81	43	742	6.0	8.6	

*1985-1987 Average rate

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



HEPATITIS A - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



HEPATITIS B

In 1988, 1,480 cases of hepatitis B were reported to the state, as compared with 1,563 cases reported in 1986. The incidence in 1988 (11.9 per 100,000) decreased 7.8% from the incidence in 1987 (12.9). The monthly number of cases remained fairly uniform throughout the year. The number of cases per month ranged from 83 (December) to 117 (November).

The age groups with the highest incidences per 100,000 were the 25-29 and the 20-24 year olds (32.3 and 29.4, respectively), followed by those aged 30-39 (19.1) and 15-19 years (15.3).

Hepatitis B infections were reported from all but 13 of Florida's 67 counties. The highest incidence per 100,000 population was observed in Gilchrist (55.5) and Dixie (39.5) counties.

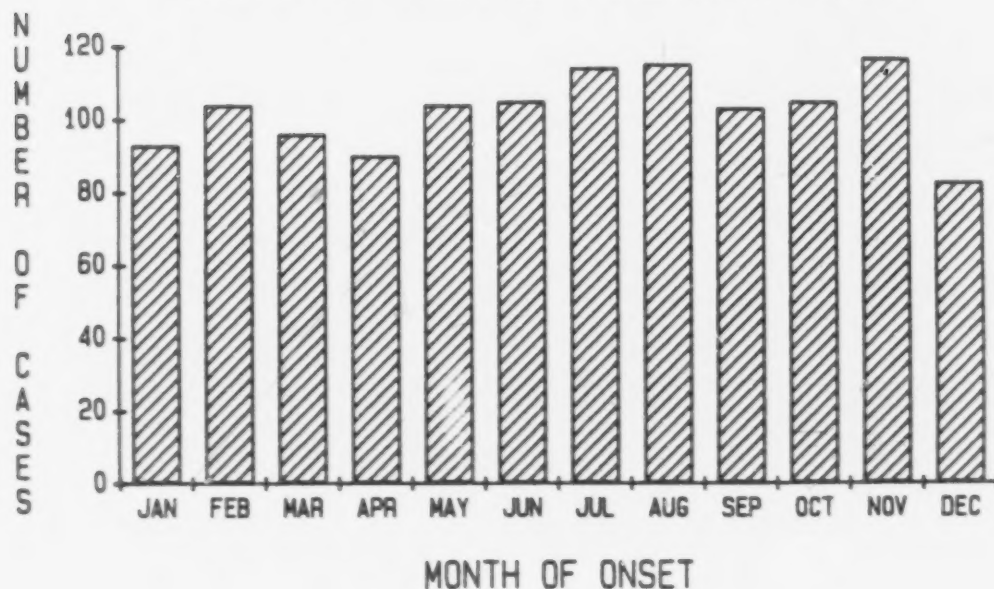
HEPATITIS B - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,

FLORIDA, 1988

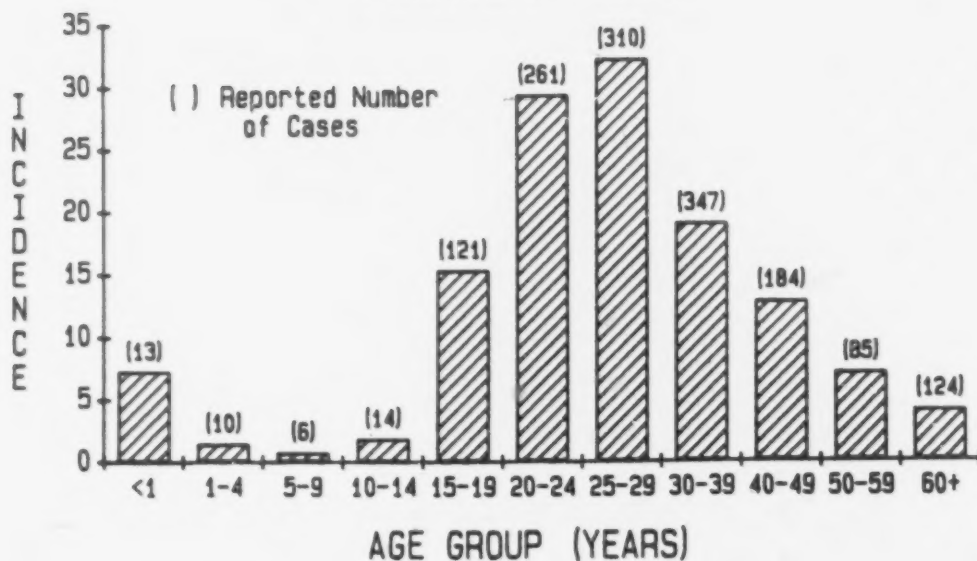
FLORIDA, 1988																			
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN		
I	Escambia	2	2	3	1	5	6	10	5	3		3	2	8	50	17.4	13.5		
	Okaloosa		6	2		5			7	4	1	1	2		28	17.8	13.9		
	Santa Rosa	1			1		1	1	2		1	1	2		10	14.7	9.2		
	Walton															0.0	11.2		
II	Bay											1			1	10.2	6.9		
	Calhoun															0.0	3.9		
	Franklin				1	1		1					1		5	10.6	27.5		
	Gadsden													1	4	32.5	11.5		
	Gulf						1	2								0.0	2.1		
	Holmes														6	13.4	9.6		
	Jackson						1	3	1		1					0.0	0.0		
	Jefferson															0.0	0.0		
	Leon		2		3	2					2	1		3	6	19	10.5	12.3	
	Liberty																0.0	29.0	
	Madison															5	26.1	12.8	
	Taylor		2				1	1						1		4	27.9	7.2	
	Wakulla											2	1		1		0.0	0.0	
	Washington																0.0	0.0	
III	Alachua	3						2	1	1	1	1			9	4.9	5.4		
	Bradford												1		1	4.0	12.4		
	Citrus						1		1	2		2	1		7	8.1	6.4		
	Columbia															0.0	11.5		
	Dixie			1			1		1					1	4	39.5	10.4		
	Glenn							2		1					4	55.5	4.6		
	Hamilton						1								1	10.5	14.3		
	Hernando	2			1			1	1	1		1		1	8	9.2	9.8		
	Lafayette															0.0	7.2		
	Lake		1				1	2	3	1	2		1		3	14	9.7	19.4	
	Levy								1		1				2	8.2	4.3		
	Manion											1	2	2	1	7	3.8	12.7	
	Marion		1													11	17.0	11.3	
	Putnam		1							1			3	1	5	4	13.2	38.5	
	Sumter		1				2				1					1	3.7	8.9	
	Suwannee												1			2	18.2	43.0	
Union					1			1								0.0	11.2		
IV	Baker											4	2		10	9.9	6.6		
	Clay			1			3									85	12.4	22.5	
	Duval	1	6		6	5	11	8	7	10	11	6	8		5	24.0	5.7		
	Flagler				1							2			2	9	19.5	15.1	
	Nassau			1			1		1				5			16	20.1	34.6	
	St. Johns	2	1	2	2		1	1	2	2		2	1		33	112	32.5	24.9	
	Volusia	9	3	6	7	4	10	6	8	6	13	4	3			24	9.0	9.5	
	Pasco	1	2	4	2	2		1	4	3	1	1	3			76	9.0	10.2	
V	Pineillas	2	5	8	5	4	3	7	5	8	2	11	8			1	2	8.9	10.7
	Hardee							1									0.0	1.1	
VI	Highlands																0.0	1.1	
	Hillsborough	9	12	4	5	11	7	5	5	3	7	10	6	6	90	10.8	14.7		
	Manatee	1	1		1			1		3	2	3	2	20	34	18.2	18.3		
	Polk	4	8	3	6	3	1	3	2	5	4	3	4	4	50	12.5	12.5		
																9	30	7.7	13.1
VII	Brevard	4	1	2			1	3	1	2	4	2				19	118	18.7	23.8
	Orange	14	7	10	7	9	12	10	9	5	4	9				15	15.8	14.5	
	Osceola	1	1	1	1	2		3	1	1	1	1				37	13.7	11.6	
	Seminole	1	4	4	1	1	2	3	6	4	3	4				9	11	11.7	13.9
VIII	Charlotte											2					0.0	0.0	
	Collier			3	1	2	2		2	2	1	1		1	12	27	20.2	17.6	
	DeSoto				1				1						2	5	21.2	31.3	
	Glades																0.0	0.0	
	Hendry	2	1	1							2			1	7	27.4	19.6		
	Lee	4		2	2	1	4	3	4	1	1	3	2	22	49	15.8	20.1		
	Sarasota	3	4	1	2	2	2	5	5	5	4	3	3	1	40	15.4	16.1		
IX															9	12	13.7	8.6	
	Indian River					1				1						16	17.1	14.1	
	Martin			2	1	2	3	2	2		1		1	2	2	2	6.9	11.5	
	Okeechobee																		
	Palm Beach	10	4	5	8	12	7	7	14	7	11	15	1			101	12.2	15.5	
	St. Lucie		2	2	4	3	2	5	2	6	2	2		6	36	26.6	13.5		
X	Broward	11	11	14	9	6	13	10	10	6	10	8	9			156	12.9	16.6	
	Dade	6	5	10	8	9	6	3	4	2	6	5			17	81	4.4	6.7	
XI																			
	Monroe			2				1	1		3	2			8	17	22.2	27.4	
STATE TOTAL		93	104	96	90	104	105	114	115	103	105	117	83	251	1480	11.9	14.1		

*1985-1987 Average rate

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



HEPATITIS B - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



HEPATITIS NON-A, NON-B ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1988, 40 cases of non-A non-B (NANB) hepatitis associated with blood or blood products were reported to the state, as compared with 57 cases reported in 1987. The incidence per 100,000 population in 1988 (0.3) decreased by 40.0% from 1987 (0.5). The number of cases per month remained fairly constant throughout the year, with the most cases seen in January, May and June (5 each). The age group with the highest incidence was the 60+ year olds (0.6 per 100,000).

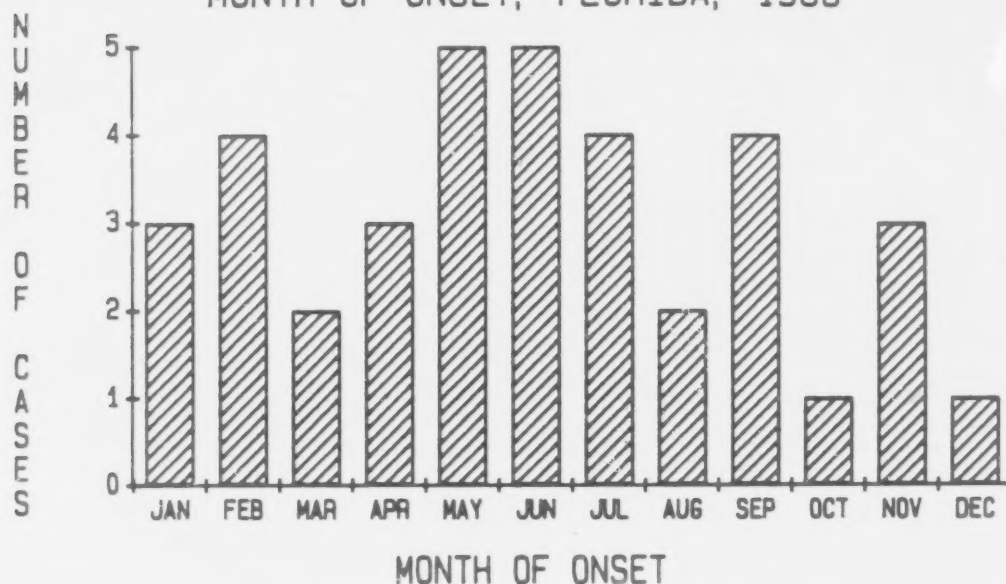
Cases of hepatitis NANB associated with blood or blood products were reported from 19 of Florida's 67 counties. The highest incidence was observed in Flagler County (4.8 per 100,000).

HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET
AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

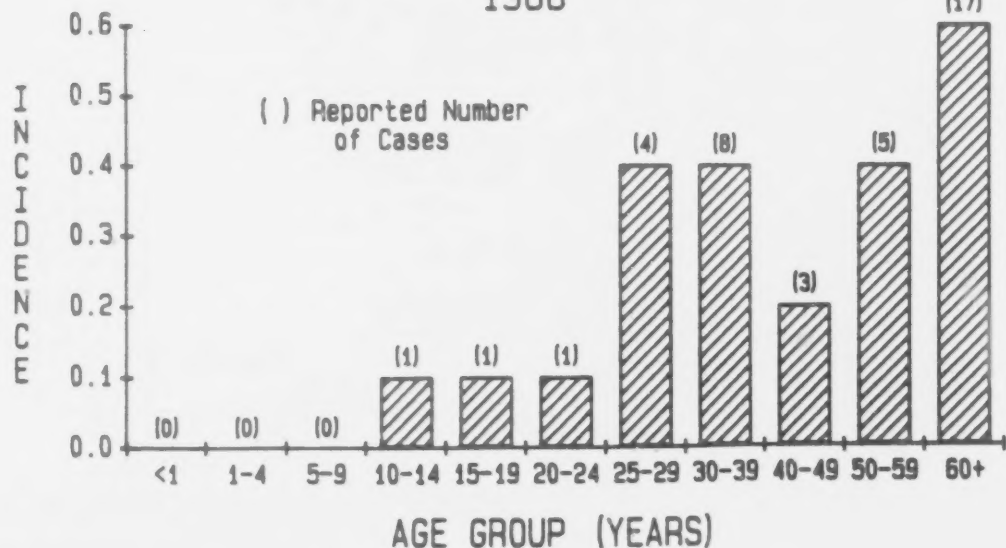
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN
I	Escambia															0.0	0.0
	Okaloosa						1	1							2	1.3	0.2
	Santa Rosa															0.0	1.0
	Walton															0.0	1.2
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	3.9
	Gulf															0.0	2.2
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.0
	Liberty															0.0	0.4
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.0
	Bradford					1									1	0.0	0.7
	Citrus															4.0	1.4
	Columbia															0.0	0.4
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.9
	Lake				1											0.0	0.0
	Levy														1	0.7	0.5
	Marion															0.0	1.4
	Putnam				1	1				1					3	1.6	0.2
	Sumter															0.0	0.0
	Suwannee															0.0	1.2
	Union															0.0	0.0
IV	Baker															0.0	0.0
	Clay															0.0	7.4
	Duval															0.0	2.6
	Flagler															0.0	0.7
	Nassau											1			1	4.8	1.9
	St Johns															0.0	2.4
	Volusia								1						1	1.3	1.3
V	Pasco					1									1	0.3	1.1
	Pinellas	1	1	1			1							1	5	0.4	1.4
VI	Hardee															0.6	1.0
	Highlands															0.0	0.0
	Hillsborough						1								1	0.1	0.3
	Manatee															0.0	0.0
VII	Polk		1						1						2	0.5	0.4
	Brevard					1	1			1					3	0.8	0.6
	Orange		1	1				1							3	0.5	0.6
	Osceola															0.0	0.4
	Seminole															0.0	1.4
VIII	Charlotte															0.0	0.0
	Collier	1								1					3	2.2	1.9
	DeSoto													1		0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	5.6
	Sarasota												1		1	0.3	0.7
IX	Indian River									1				1	2	2.3	2.5
	Martin															0.0	1.6
	Okeechobee							2				1			3	0.4	0.0
	Palm Beach															0.0	0.7
	St Lucie															0.0	1.1
X	Broward	1				1									2	0.2	0.6
XI	Dade		1		1						1	1			4	0.2	0.3
	Monroe															0.0	0.0
STATE TOTAL		3	4	2	3	5	5	4	2	4	1	3	1	3	40	0.3	0.7

*1985-1987 Average rate

HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



HEPATITIS NON-A, NON-B NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1988, 92 cases of non-A non-B (NANB) hepatitis not associated with blood or blood products were reported to the state, as compared with 98 cases reported in 1987. The incidence in 1988 (0.7 per 100,000) decreased slightly from the rate in 1987 (0.8 per 100,000).

Age groups with the highest incidence were the 25-29 year olds (2.2 per 100,000), 30-39 year olds (1.3 per 100,000), and those aged 40-49 years (1.0 per 100,000). The number of cases per month ranged from 2 in January to 11 in May.

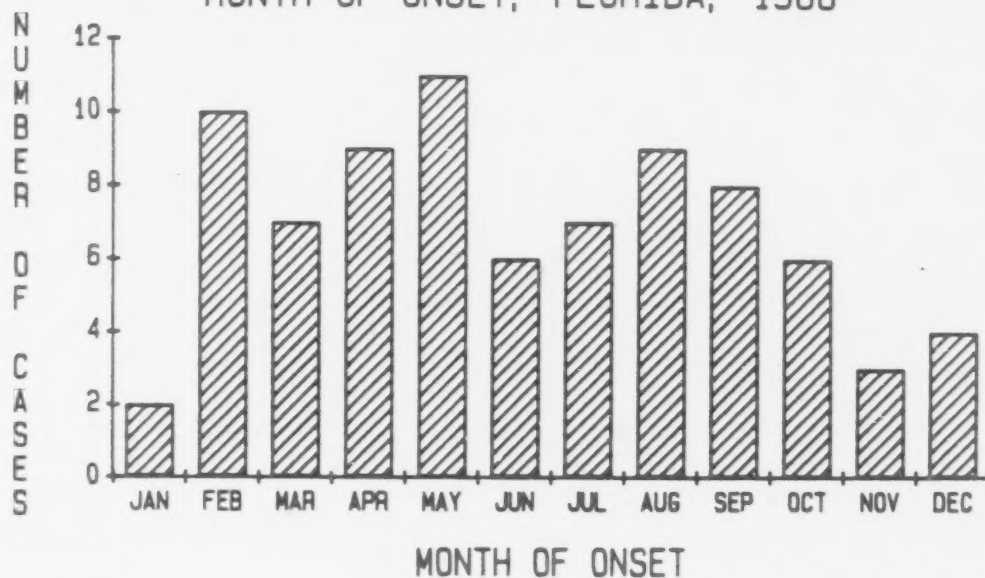
Cases of hepatitis NANB not associated with blood or blood products were observed in 21 of Florida's 67 counties. The highest incidence was reported from Orange County (4.0 per 100,000).

HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET
AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

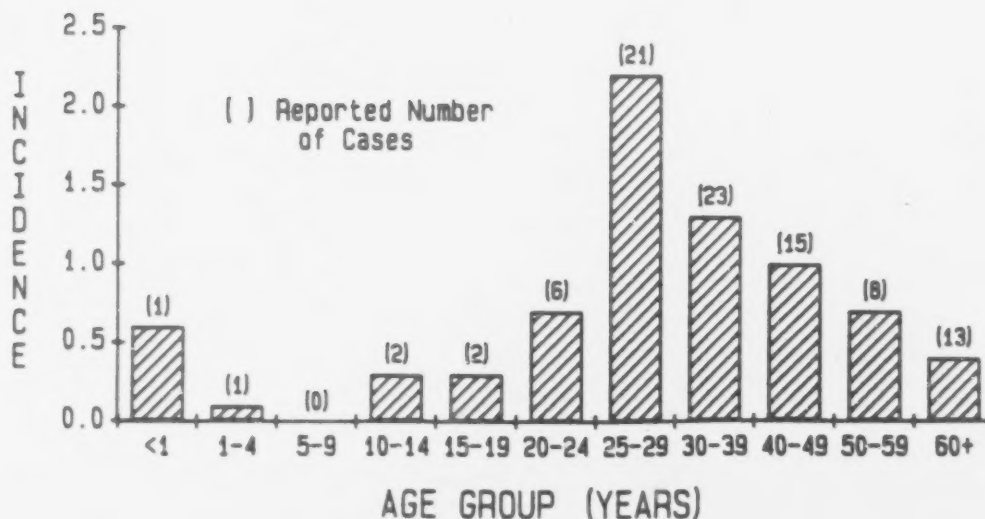
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia									1					1	0.3	0.5
	Okaloosa															0.0	0.2
	Santa Rosa															0.0	0.0
	Walton															0.0	1.2
II	Bay															0.0	0.8
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	1.4
	Gulf															0.0	2.9
	Holmes															0.0	0.0
	Jackson															0.0	0.8
	Jefferson															0.0	0.0
	Leon															0.0	2.1
	Liberty															0.0	0.0
	Madison															0.0	2.1
	Taylor															0.0	3.6
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua				1										1	0.5	0.0
	Bradford															0.0	12.4
	Citrus															0.0	0.9
	Columbia		1												1	2.3	0.8
	Dixie															0.0	0.0
	Glachrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando	1													1	1.2	1.8
	Lafayette															0.0	7.2
	Lake															0.0	3.6
	Levy															0.0	0.0
	Marion															0.0	0.8
	Palm Bay													1	1	1.5	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	9.2
IV	Baker															0.0	0.0
	Clay								1						1	1.0	2.6
	Duval				1										1	0.1	1.1
	Flagler															0.0	0.0
	Nassau															0.0	2.4
	St. Johns															0.0	0.4
	Volusia								1	2					3	0.9	1.8
	Volusia												1		4	1.5	1.8
V	Pasco				1	1				1							
	Pinellas			1	1	1	1	1	3		1			1	10	1.2	1.7
VI	Hardee															0.0	1.5
	Highlands															0.0	0.0
	Hillsborough	1		2		1								1	5	0.6	1.8
	Manatee		2		1										3	6	3.2
	Polk		1												1	0.2	5.1
VII	Brevard								1						1	0.3	0.3
	Orange		2	2	2	4	2	2	1	3	2	1		4	25	4.0	3.0
	Osceola															0.0	0.4
	Seminole		1							1					2	0.7	1.1
	Seminole															0.0	1.6
VIII	Charlotte																
	Collier		1							1	1	1			4	3.0	1.6
	DeSoto															0.0	1.5
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee		1	1	1			1						1	5	1.6	0.5
	Sarasota															0.0	3.2
IX	Indian River															0.0	2.1
	Martin															0.0	2.7
	Okeechobee															0.0	0.0
	Palm Beach		1	1		4	3	2			1	1	1		14	1.7	0.9
	St. Lucie															0.0	0.5
X	Broward				1						1				2	0.2	3.1
XI	Dade							1	1					1	3	0.2	0.6
	Monroe															0.0	0.0
STATE TOTAL		2	10	7	9	11	6	7	9	8	6	3	4	10	92	0.7	1.6

*1985 - 1987 Average rate

HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH
BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY
MONTH OF ONSET, FLORIDA, 1988



HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH
BLOOD OR BLOOD PRODUCTS) - REPORTED
INCIDENCE PER 100,000 POPULATION, BY AGE
GROUP, FLORIDA, 1988



HEPATITIS UNSPECIFIED

In 1988, 76 cases of hepatitis unspecified were reported to the state, as compared with 100 cases reported in 1987. The incidence in 1988 (0.6 per 100,000) decreased 25% from 1987 (0.8 per 100,000).

The highest age-specific incidence per 100,000 population occurred among the 25-29 year olds (2.2), followed by those aged 15-19 (1.4) and 20-24 years (1.1). The most cases occurred during the month of November (13) followed by January (8) and May (7).

Cases of unspecified hepatitis were reported from 21 of Florida's 67 counties. The highest incidence was observed in Wakulla County (13.9 per 100,000).

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION,
BY COUNTY, FLORIDA, 1988

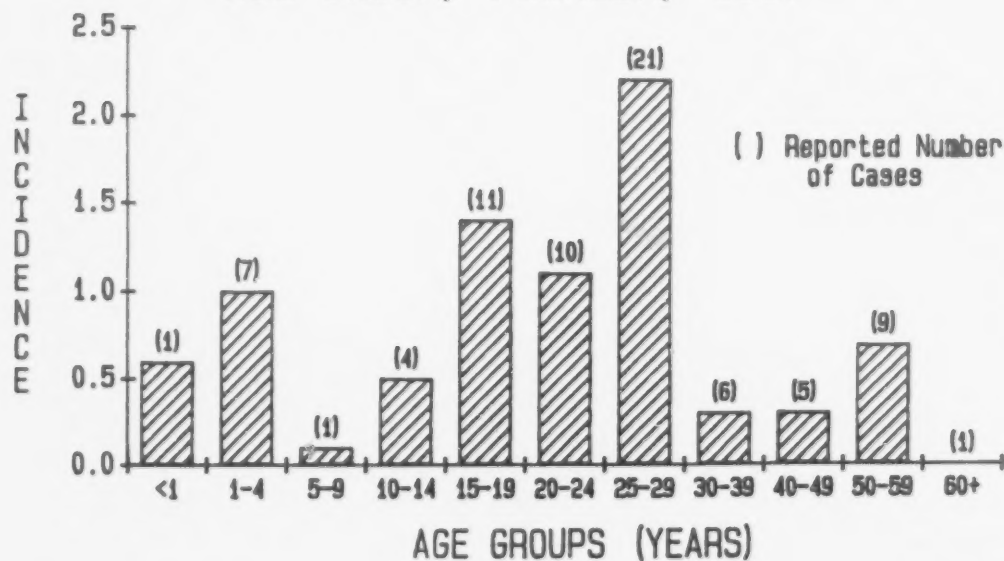
COUNTY, FLORIDA, 198																		
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN	
I	Escambia															0.0	0.5	
	Okaloosa					1						1			2	1.3	0.2	
	Santa Rosa															0.0	0.0	
	Walton															0.0	1.2	
II	Bay													1	1	0.7	0.8	
	Calhoun															0.0	0.0	
	Franklin															0.0	0.0	
	Gadsden															0.0	1.4	
	Gulf															0.0	2.9	
	Holmes															0.0	0.0	
	Jackson	1													1	2.2	0.8	
	Jefferson															0.0	0.0	
	Leon															0.0	2.1	
	Liberty															0.0	0.0	
	Madison															0.0	2.1	
	Taylor															0.0	3.6	
	Wakulla													2	2	13.9	0.0	
	Washington															0.0	0.0	
III	Alachua															0.0	0.0	
	Bradford															0.0	12.4	
	Citrus															0.0	0.9	
	Columbia															0.0	0.8	
	Dixie															0.0	0.0	
	Gilchrist															0.0	0.0	
	Hamilton															0.0	0.0	
	Hernando			1											1	1.2	1.8	
	Lafayette															0.0	7.2	
	Lake															0.0	3.6	
	Levy															0.0	0.0	
	Marion															0.0	0.8	
	Putnam															0.0	0.0	
	Sumter															0.0	0.0	
	Suwannee															0.0	0.0	
	Union			1											1	9.1	9.2	
	IV	Baker															0.0	0.0
		Clay															0.0	2.6
Duval																0.0	1.1	
Flagler																0.0	0.0	
Nassau																0.0	2.4	
St. Johns																0.0	0.4	
Volusia													1		1	0.3	1.8	
Pasco			1												1	0.4	1.8	
Pinellas				1	1					1	2		1	6	0.7	1.7		
VI	Hardee															0.0	1.5	
	Highlands															0.0	0.0	
	Hillsborough				2										2	0.2	1.8	
	Manatee															0.0	3.2	
	Polk	5	2	2			4	4	4	1	1	1	3	3	33	8.2	5.1	
VII	Brevard															0.0	0.3	
	Orange		1						1		1	5			8	1.3	3.0	
	Osceola															0.0	0.4	
	Seminole															0.0	1.1	
VIII	Charlotte													2	2	2.1	1.6	
	Collier															0.0	1.6	
	DeSoto															0.0	1.5	
	Glades															0.0	0.0	
	Hendry															0.0	0.0	
	Lee	1					1								2	0.6	0.5	
	Sarasota	1						1				1			3	1.2	3.2	
	Indian River			1											1	1.1	.21	
IX	Martin									1					1	1.1	2.7	
	Okeechobee															0.0	0.3	
	Palm Beach		1												1	0.1	0.9	
	St. Lucie															0.0	0.0	
	St. Lucie									2					1	4	0.3	
X	Broward					1					2					2	0.1	
	Dade			1									1		1	1.3	0.0	
XI	Monroe																	
	Monroe																	
STATE TOTAL		8	5	6	3	7	5	5	2	4	3	13	5	10	76	0.6	1.6	

*1985 - 1987 Average rate

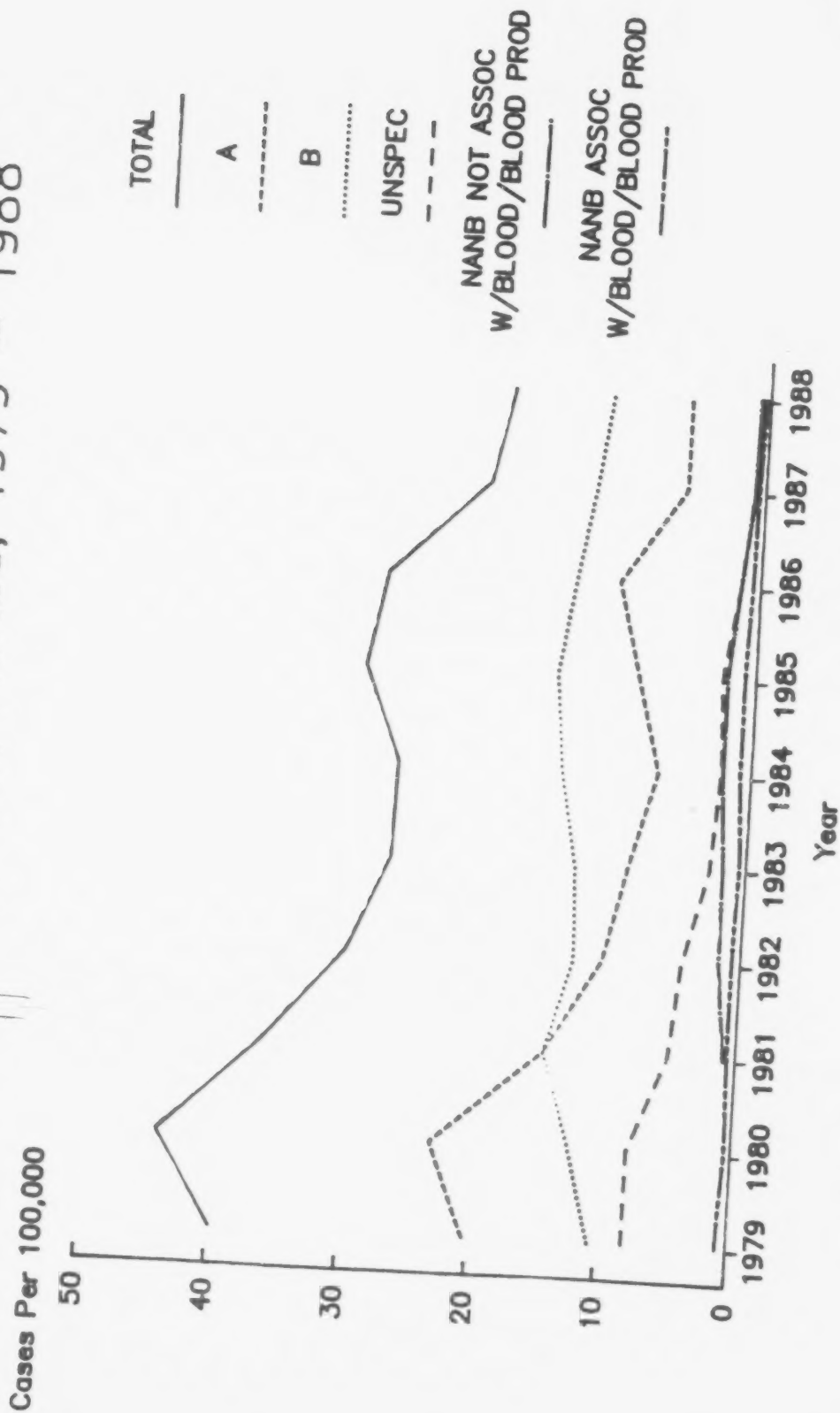
HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS UNSPECIFIED - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS - Reported Incidence Per 100,000 Population, By Year, Florida, 1979 - 1988



CAMPYLOBACTERIOSIS

In 1988, 1,934 cases of campylobacteriosis were reported to the state. The statewide incidence per 100,000 population was 15.5. This represents an increase of 13.1% over the 1987 incidence (13.7).

The highest age-specific incidence per 100,000 population was in the less than 1 year old age group (36.6), followed by those aged 1-4 years (36.3). A second, smaller peak is noted in the 20-24 year old (25.3) and 25-29 year old (28.3) age groups. Rates for other age groups remained significantly lower.

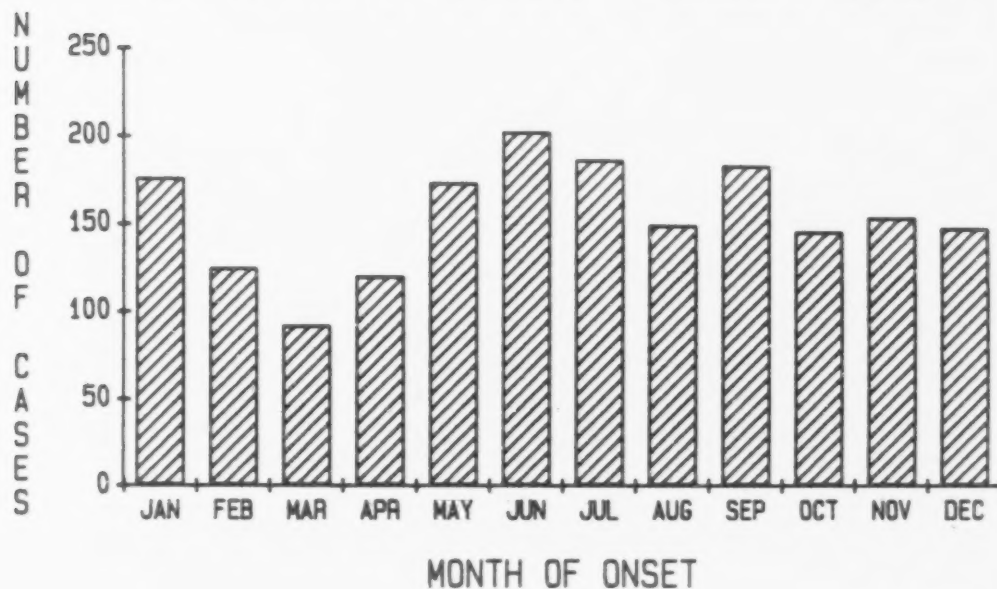
The number of reported cases by month of onset was highest during the period May through July, and again during September. Cases of campylobacteriosis were reported from all but 11 of Florida's 67 counties. The highest rates were observed in Gilchrist (69.4 per 100,000), Collier (64.2 per 100,000), and Leon (62.2 per 100,000) counties.

**CAMPYLOBACTERIOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1988**

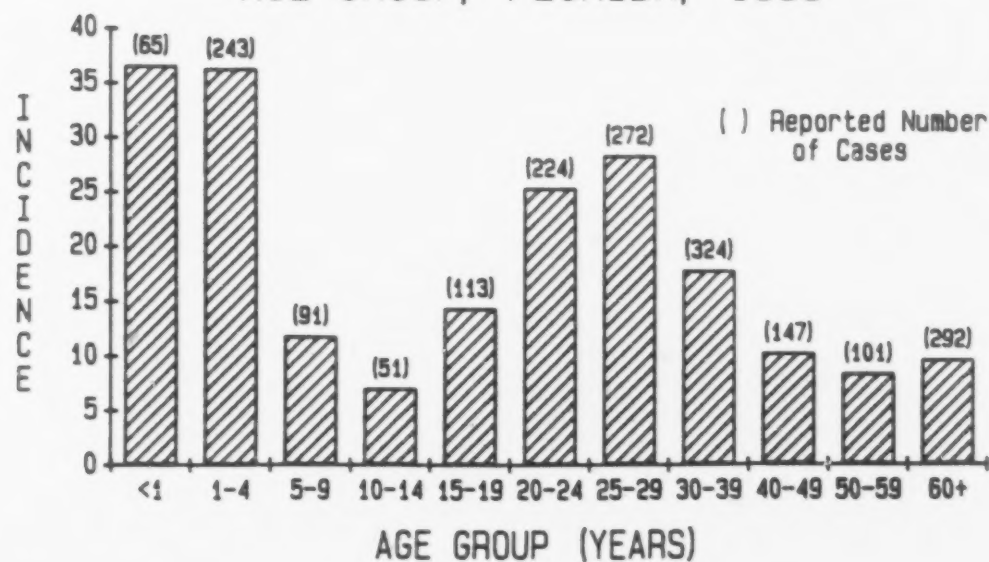
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN
I	Escambia		1	2	3	11	6	6	2	8	2	3		2	48	16.7	13.8
	Okaloosa	2		2	2	4	8	5	1		5	1			30	19.1	6.2
	Santa Rosa	1	1	2		2	1	1		2			1		11	16.2	18.6
	Walton															0.0	0.0
II	Bay						1	1		5	3			1	11	8.1	2.6
	Calhoun															0.0	17.3
	Franklin															0.0	0.0
	Gadsden	1							1		1		1		4	8.5	12.3
	Gulf				1										1	8.1	0.0
	Holmes											1			1	6.1	0.0
	Jackson	1													1	2.2	0.0
	Jefferson				1										2	16.5	2.8
	Leon	9	6	3	1	10	13	10	4	10	12	19	4	12	113	62.2	55.7
	Liberty															0.0	21.8
	Madison		1							1					2	12.5	4.2
	Taylor			2	2		2	3			1				10	52.3	43.8
	Wakulla								1		1				2	13.9	33.7
	Washington					1									1	6.4	4.3
III	Alachua	6	1	1	1	3	2	10	5	7	2	4	1	2	45	24.4	32.3
	Bradford		1												1	4.0	8.3
	Citrus									1					1	1.2	1.3
	Columbia		2							1	1	1			5	11.7	50.1
	Dixie															0.0	7.0
	Gluchrist					1	1	1	2						5	69.4	18.4
	Hamilton															0.0	7.1
	Hernando															0.0	0.9
	Lafayette		1					2							3	58.5	14.4
	Lake	1	1							1					3	2.1	6.4
	Levy			1			1								2	8.2	8.6
	Marion	4	3	2		3	9	6	1	3	2	1	2	5	41	22.2	27.1
	Putnam	3		1	1	1	2	4	2		2	2	2		20	30.8	35.7
	Sumter								1						1	3.3	1.2
	Suwannee						1		1						2	7.5	2.5
	Union															0.0	12.3
IV	Baker			1											1	5.3	1.9
	Clay		1		3	3	3	4	1	4	2	3	2		26	25.7	16.1
	Duval	6	8	5	3	15	18	14	19	13	8	8	16		133	19.4	9.3
	Flagler						1							1	2	9.6	5.7
	Nassau								1			1			2	4.3	3.2
	St. Johns	3	1	1	1	1	1	1	1	2	1	1	3		17	21.3	10.3
	Volusia	3	4	1	5	3	3	2	2	1	1	4	3		32	9.3	8.5
	Pasco	1			2		3	3	1	2		2	1		15	5.7	8.0
	Pinellas	10	9	5	5	10	7		4	7	3	4	2	1	67	7.9	9.3
VI	Hardee															0.0	9.2
	Highlands								1	3	1	1			6	9.0	2.2
	Hillsborough	12	5	4	8	10	6	11	10	3	4	7	9		89	10.7	9.6
	Manatee		1		3		1					2	2	3	12	6.4	4.3
	Polk	4	5	2	3	4	6	4	1	6	2	2	5	1	45	11.2	12.4
VII	Brevard	3	1	2	2	1	2	1	3		1				16	4.1	2.3
	Orange	9	5	9	8	16	12	14	11	13	15	11	8		131	20.8	20.1
	Osceola			1	1		1	1		3	2				9	9.5	12.6
	Seminole	6	2	1	1	4	3	3	3	4	2	6			36	13.3	13.9
VIII	Charlotte		1	1										1	3	3.2	7.9
	Collier	9	8	2	10	5	7	1	7	11	3	8	5	10	86	64.2	44.7
	DeSoto					1									1	4.2	0.0
	Glades															0.0	4.6
	Hendry															0.0	2.8
	Lee	10	6	3	4	7	6	11	1	2	5	4	9	5	73	23.5	10.4
	Sarasota	2				3	5		2	1	2	2	2		19	7.3	7.1
	Indian River		2		1	2	2			1	1			2	11	12.5	4.1
IX	Martin	3	7		4	1	1	7	4	6	1	4	12		50	53.6	60.5
	Okeechobee						3	1					1	1	6	20.6	10.2
	Palm Beach	29	20	16	18	18	19	20	25	23	22	22	25		257	31.0	30.0
	St. Lucie			1		3	2	2	1	2	1	2			14	10.3	10.5
	Broward	21	10	10	14	18	21	14	9	14	14	9	12	6	172	14.2	14.1
XI	Dade	16	11	11	12	12	22	21	21	23	23	19	18	27	236	12.9	11.0
	Monroe	1													1	1.3	1.4
STATE TOTAL		176	125	92	120	173	202	186	149	183	146	154	148	80	1934	15.5	13.8

*1985 - 1987 Average rate

CAMPYLOBACTERIOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



CAMPYLOBACTERIOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



SALMONELLOSIS

In 1988, 2,435 cases of salmonellosis were reported to the state. This represents a decrease from the total number of cases reported in 1987 (2,960). The incidence in 1988 (19.5 per 100,000) was 20.1% lower than the incidence in 1987 (24.4 per 100,000). There was a gradual increase in cases beginning in March (127), peaking in September (335).

The highest age-specific incidence per 100,000 population was in the less than 1 year old age group (267.3) followed by those aged 1-4 (128.6). Incidence then decreased rapidly with increasing age.

Salmonellosis was reported from all but 8 of Florida's 67 counties. The highest incidence per 100,000 population was observed in Leon (62.2) and DeSoto (51.0) counties.

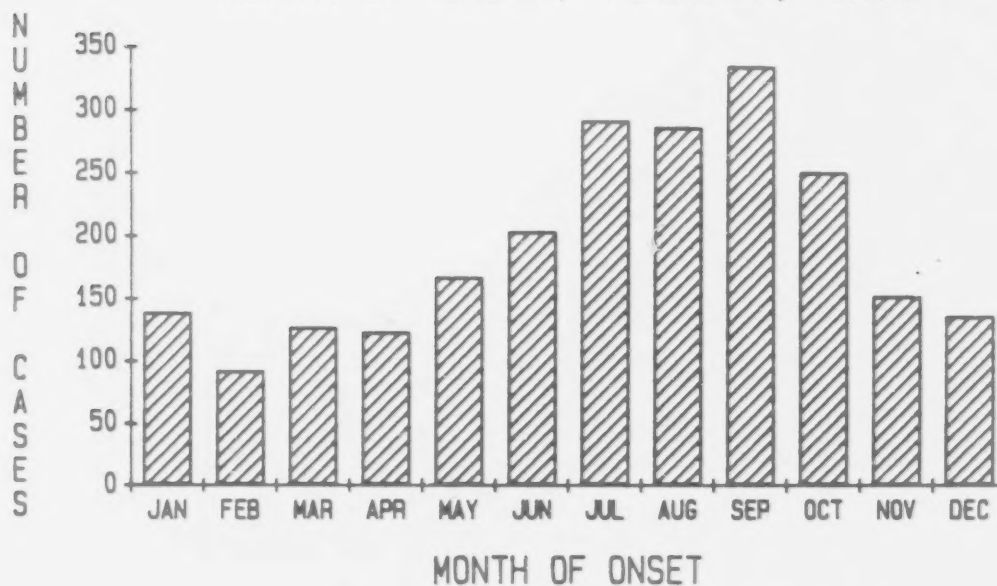
Usually food/waterborne, this disease serves as a marker for inadequate sanitary practices in food preparation (i.e., "too warm or not hot enough"), either in the home or food service industry.

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1988

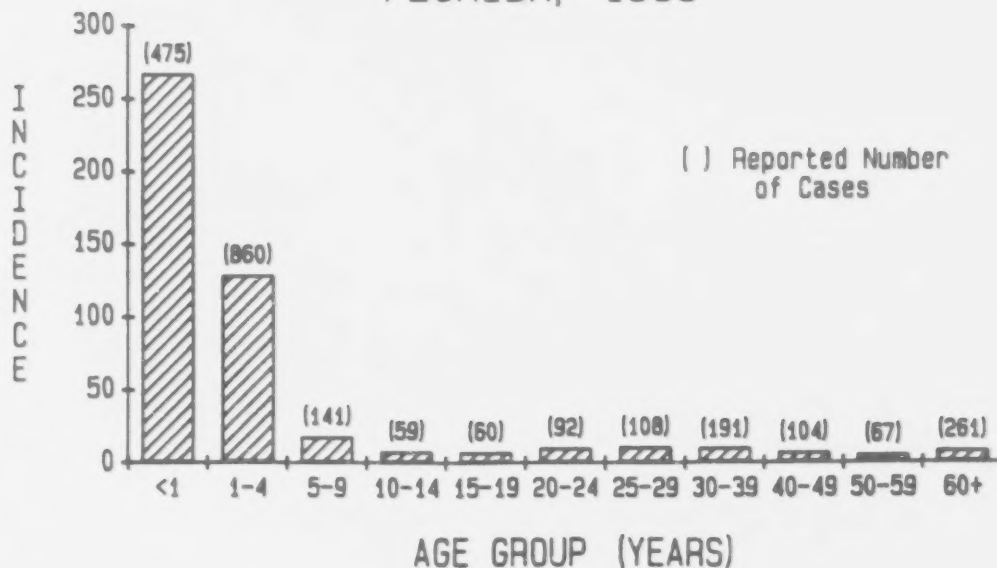
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia	1	3	2		6	5	7	9	5	2	1	3		44	15.3	23.7
	Okaloosa	2	3		1	3	4	6	12	7	4		1	2	45	28.7	26.1
	Santa Rosa					2	4	4	3	1		1	2		17	25.0	32.6
	Walton	1	1	1			1								4	13.9	19.8
II	Bay	1		2	1		3	2	1	9	6		1	3	29	21.3	52.0
	Calhoun															0.0	48.4
	Franklin					1									1	11.5	0.0
	Gadsden	1	5			4	1	2		1	2	2	2		20	42.5	26.1
	Gulf													1	1	8.1	0.0
	Holmes															0.0	0.0
	Jackson	1											3		4	9.0	8.0
	Jefferson												2	1	3	24.7	8.5
	Leon	3	4	4	5	11	8	17	16	18	12	3	3	9	113	62.2	66.3
	Liberty															0.0	29.0
	Madison				1	1		3		1					6	37.4	33.7
	Taylor	3			1		2		1						7	36.6	58.4
	Wakulla					1			1	1		1			4	27.9	62.6
	Washington		1		1										2	12.9	19.7
III	Alachua	2		3	1	2	2	6	12	6	7	1	1	4	47	25.4	48.4
	Bradford										1				1	4.0	19.3
	Citrus						2		2	1					5	5.8	11.2
	Columbia	1	1	2	1	2	3	3		1	1	1		3	19	44.6	60.0
	Dixie															0.0	13.9
	Gilchrist											1			1	13.9	18.4
	Hamilton															0.0	10.7
	Hernando			1			3	1	2	1		1		1	10	11.5	12.5
	Lafayette															0.0	36.0
	Lake	3	3	1	1	3	3	2	2	6	6	1	1	1	33	23.0	22.7
	Levy					1		1							2	8.2	14.4
	Marion	2	3	6	2	2	2	4	2	4	10	1	2	18	58	31.4	36.6
	Putnam		2	3			1	1	3	4	2				16	24.7	42.5
	Sumter					1	1	2							4	13.2	57.2
	Suwannee			2			2		3	1	1				9	33.6	12.8
	Union				1			1		1					3	27.2	24.6
																0.0	14.9
IV	Baker															0.0	14.9
	Clay				1	1	3	4		7	8	2	2		28	27.6	30.8
	Duval	6	4	1	5	15	17	30	20	20	25	19	18		180	26.3	27.5
	Flagler															0.0	28.4
	Nassau				1	3	1		2	9	1	2			19	41.2	23.8
	St Johns	1	3		1		2	2	4	1	2		2	1	21	26.3	19.4
	Volusia	8		2	4	10	9	13	17	10	7	3	2	1	86	25.0	37.3
		3	1	2	2	2	3	2	2	5	1	4	1		29	10.9	22.0
V	Pasco	3	1	2	2	2	3	2	2	5	1	4	1		29	10.9	22.0
	Pinellas	2	2	7	10	5	7	5	5	12	15	10	5	1	86	10.2	12.9
VI	Hardee		1		1							1			3	13.3	18.4
	Highlands				1			1		2	1				5	7.5	9.3
	Hillsborough	2	1	6	2	6	7	5	12	10	10	11	10		82	9.9	17.2
	Manatee	1			1			3	2	3	2	1	2	8	23	12.3	25.2
	Polk	6	4	3	5	3	6	6	13	8	11	2	3	1	71	17.7	42.9
VII	Brevard	3	2	5	3	2	7	14	4	11	5	6	11	2	75	19.2	27.1
	Orange	4	6	8	10	6	14	17	22	18	19	6	10	4	144	22.8	33.4
	Osceola	1	1		4			2	5	6	3	5	2		29	30.5	36.5
	Seminole	4		4	2	2	5	12	5	8	14	8			65	24.1	36.4
VIII	Charlotte	1	1	1	3	2	2	2	1	3	2	1	1		25	26.6	38.0
	Collier	2	1	1	3	2	1	7	2	5	1	2	1	4	32	23.9	38.8
	DeSoto		1			1		1	2	1	1			5	12	51.0	82.0
	Glades		1								1				2	26.4	18.6
	Hendry	1		2	1		2			3		1	1		11	43.1	46.3
	Lee	5	1	1	4	4	4	6	7	4	2	7	2	8	55	17.7	22.4
	Sarasota	2	2	1	3	2	2	3	5	7	2	3	3		35	13.5	30.4
		1			1	1		2					1	3	9	10.3	15.2
IX	Indian River																
	Martin	4	1				3	1	4	4	2	2	5		26	27.9	35.5
	Okeechobee			1			1	1				1		1	5	17.2	42.0
	Palm Beach	16	7	10	7	17	17	27	21	34	18	9	12		195	23.6	26.7
	St Lucie	5	2	2	2	5	7	3	3	3	4	1	2		39	28.8	18.3
X	Broward	14	7	14	12	14	13	18	22	23	16	8	9	12	182	15.1	18.0
XI	Dade	24	15	29	18	23	22	38	37	51	22	22	8	33	342	18.7	12.0
	Monroe	2				1	1	3			1	1	1	1	11	14.3	10.5
STATE TOTAL		139	92	127	123	167	203	291	286	335	251	152	136	133	2435	19.5	24.5

*1985 - 1987 Average rate

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



SALMONELLOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



SHIGELLOSIS

In 1988, 1,995 cases of shigellosis were reported to the state. This represents a tremendous increase from the 818 cases reported in 1987. The incidence in 1988 (16.0 per 100,000) increased 135.3% from the rate in 1987 (6.8).

The seasonal trend was an increase beginning in May and peaking in September, before gradually declining through the Fall and Winter months.

Children aged 1-4 had the highest reported incidence of illness per 100,000 population (135.5), which represents a 153.7% increase from the 1987 incidence (53.4). The next highest incidence was observed in the 5-9 year old age group (53.6). Incidence was relatively constant for the remaining age groups.

Shigellosis cases were reported from all but 19 of Florida's 67 counties. The highest rate per 100,000 population was observed in Nassau (117.0), Duval (69.7), Marion (67.7) and Volusia (58.6) counties where community outbreaks of shigellosis have occurred.

Usually spread person to person via fecal/oral route, this disease serves as a marker for day care crowding and/or inadequate personal hygiene facilities/practices.

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1988

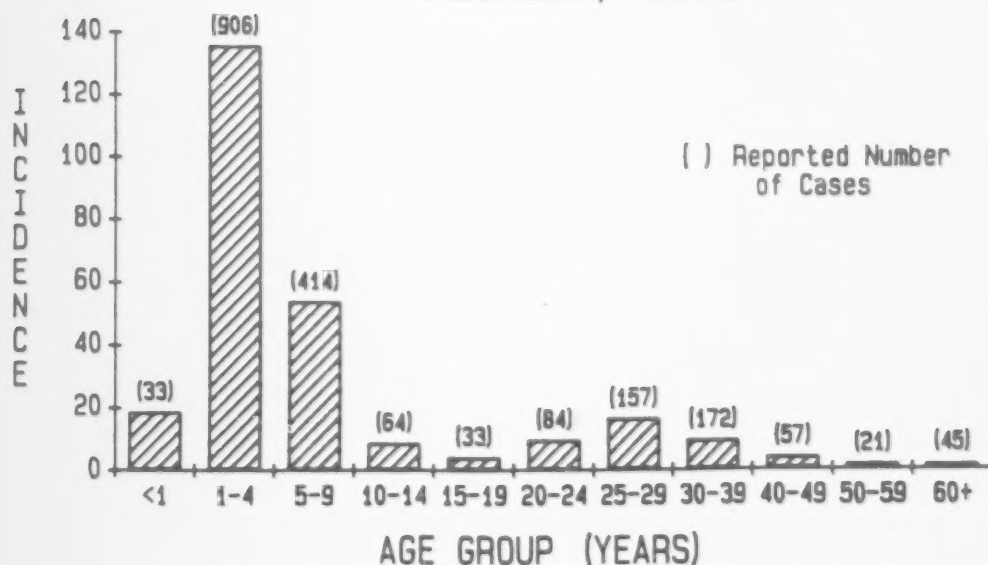
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN
I	Escambia	1				1	1	1	4	8	1	1	1		19	6.6	1.7
	Okaloosa				1					1					2	1.3	1.4
	Santa Rosa							8	1		1	1			11	16.2	2.5
	Walton															0.0	2.5
II	Bay	1							1						2	1.5	5.3
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden						3				1				4	8.5	10.2
	Gulf															0.0	0.0
	Holmes															0.0	2.1
	Jackson															0.0	10.3
	Jefferson															0.0	0.0
	Leon	1	3		6			2		1	1			1	15	8.3	31.2
	Liberty															0.0	0.0
	Madison															0.0	8.4
	Taylor							1		1					2	10.5	10.9
	Wakulla										1	1			2	13.9	28.9
	Washington															0.0	2.2
III	Alachua						1		2		4		2		9	4.9	23.5
	Bradford															0.0	0.0
	Citrus							1							1	1.2	2.1
	Columbia								3						3	7.0	8.2
	Dixie															0.0	0.0
	Gilchrist															0.0	13.8
	Hamilton	1													1	10.5	0.0
	Hernando															0.0	1.3
	Lafayette															0.0	7.2
	Lake															0.0	7.9
	Levy															0.0	4.3
	Marion	2	1					4	1	4	31	7	53	22	125	67.7	8.3
	Putnam	1			1	2	1	1	7	3	2				18	27.8	10.8
	Sumter								1		1				2	6.6	2.3
	Suwannee	1													1	3.7	0.0
	Union															0.0	0.0
IV	Baker								1						1	5.3	5.6
	Clay		1	2	1	1	2	3	4	3	1	2	1		21	20.7	2.9
	Duval	4	13	8	22	44	92	50	68	96	42	22	16		477	69.7	7.3
	Flagler										1	1	1	1	4	19.2	1.9
	Nassau				1	1			17	24	7	3	1		54	117.0	0.8
	St. Johns	1		4			1	1	1	5	3				16	20.1	2.7
	Volusia	1	1		2	1	5	4	14	9	30	46	71	18	202	58.6	3.1
	Pasco								1	1	5	1	3		11	4.1	6.8
V	Pinellas	1	2	1	1		3		1	2		1	2	1	15	1.8	1.7
	Hardee							1	1						3	13.3	12.2
VI	Highlands										5	1	2		8	12.0	1.1
	Hillsborough	1	1			2	5	3	2	1	6	6	2		29	3.5	9.8
	Manatee	1				1				4	2		1	2	11	5.9	3.2
	Polk	1	1		1	1	5	13	6		5	5	6	3	47	11.7	32.3
	Brevard		1	1	1		1	1	1	1	1				8	2.0	3.7
VII	Orange	10	7	4	2	4	7	9	18	5	9	5	3	2	85	13.5	16.8
	Osceola		1									2	2		5	5.3	2.0
	Seminole	1		2	1	2	10	3		3	1				23	8.5	10.9
	Charlotte				1									1	2	2.1	23.4
VIII	Collier	1				2	3	2	5	7	7	7	9	4	47	35.1	11.1
	DeSoto		6							2			1		9	38.2	111.8
	Glades															0.0	0.0
	Hendry					1					1				2	7.8	4.2
	Lee	1			4					2	1	1		2	11	3.5	2.5
	Sarasota		1		1		1				1	14			18	6.9	1.2
	Indian River	1							1			1			3	3.4	5.8
IX	Martin		1					2	6	4		4	2		19	20.4	21.5
	Okeechobee	1	1			1			1	2	1				7	24.1	21.6
	Palm Beach	8	6	5	5	27	27	50	29	30	38	14	5		244	29.5	12.3
	St. Lucie								1						1	0.7	3.2
	Broward	12	18	23	14	14	20	22	16	8	8	10	13	18	196	16.2	6.5
XI	Dade	8	10	12	14	9	20	20	22	25	17	15	9	17	198	10.8	5.4
	Monroe						1								1	1.3	1.8
STATE TOTAL		61	75	62	79	114	209	202	236	252	235	171	207	92	1995	16.0	8.3

*1985 - 1987 Average rate

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



SHIGELLOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



VIBRIO INFECTIONS

In 1988, there was a total of 57 reported vibrio infections, including Vibrio parahaemolyticus (14 cases), Vibrio vulnificus (14), Vibrio cholerae non-01 (12), Vibrio hollisae (5), Vibrio mimicus (5), Vibrio alginolyticus (4), and Vibrio fluvialis (3).

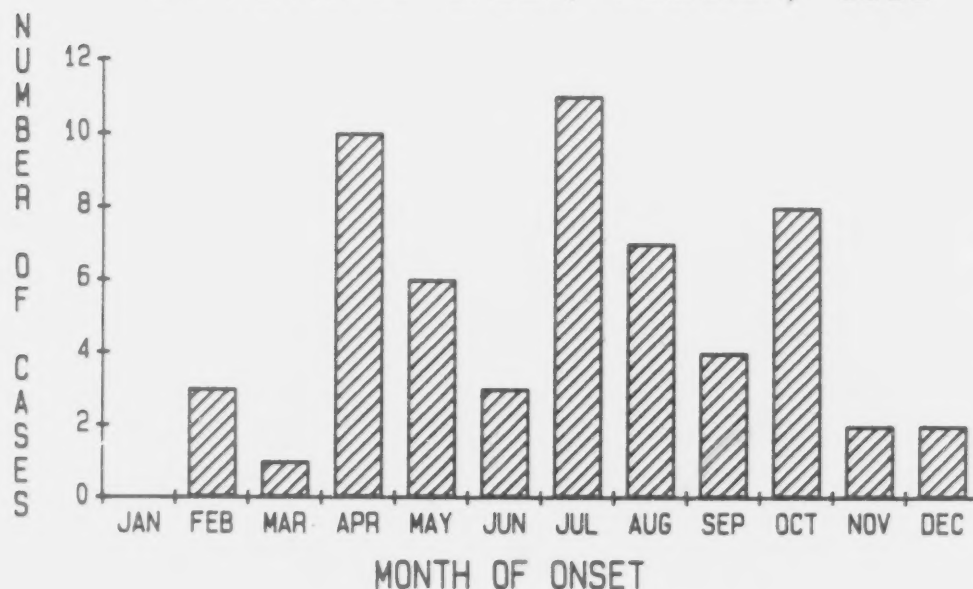
The median age of patients was 37 years. Seventy-two percent of patients were male. The county reporting the most infections was Leon (13), followed by Hillsborough (7), and Broward (6). The month with the peak number of cases was July (11), followed by April (10), and October (8). Fifty-three percent of the cases were associated with raw oyster consumption, and twenty-three percent with wounds.

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1988

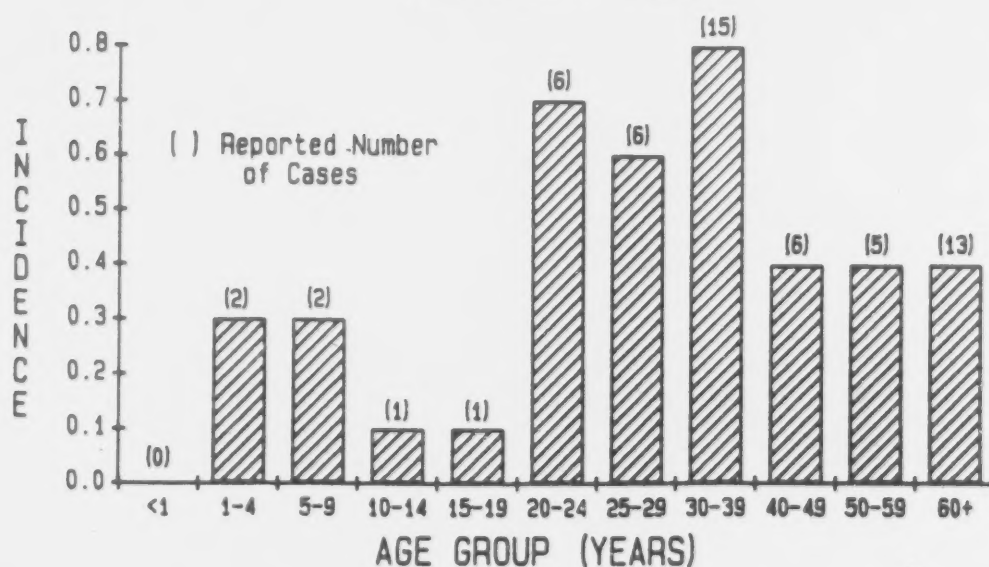
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN
I	Escambia															0.0	1.1
	Okaloosa					1					1				2	1.3	0.9
	Santa Rosa				1										1	1.5	0.5
	Walton															0.0	0.0
II	Bay		1			1		1				1			4	2.9	3.8
	Calhoun															0.0	0.0
	Franklin										1				1	11.5	0.0
	Gadsden									1					1	2.1	1.4
	Gulf															0.0	0.0
	Holmes															0.0	2.1
	Jackson															0.0	2.3
	Jefferson															0.0	0.0
	Leon			1	5	1	1	2			1		2		13	7.2	7.9
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	3.6
	Wakulla										1				1	7.0	7.4
	Washington															0.0	2.2
III	Alachua															0.0	0.4
	Bradford															0.0	0.0
	Citrus							1	1						2	2.3	0.0
	Columbia															0.0	0.8
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.3
	Levy															0.0	0.0
	Marion															0.0	0.2
	Putnam															0.0	0.6
	Sumter															0.0	1.2
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	0.0
	Clay															0.0	0.7
	Duval				1			1	1		1				4	0.6	0.5
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	0.0
V	Volusia								1						1	0.3	0.6
	Pasco															0.0	0.3
VI	Pinellas					1						1			2	0.2	0.3
	Hardee															0.0	0.0
VII	Highlands															0.0	0.0
	Hillsborough		2		1	1		1		2					7	0.8	1.1
	Manatee															0.0	0.2
	Polk															0.0	0.3
VIII	Brevard								1						1	0.3	0.1
	Orange															0.0	0.1
	Osceola															0.0	0.0
	Seminole															0.0	0.0
IX	Charlotte															0.0	0.0
	Collier										1				1	0.7	0.6
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee				1				1						2	0.6	0.3
X	Sarasota															0.0	0.4
	Indian River															0.0	0.0
	Martin				1			1							2	2.1	0.8
	Okeechobee															0.0	0.0
	Palm Beach						1	1							2	0.2	0.6
XI	St. Lucie															0.0	1.1
	Broward						1	3	1		1				6	0.5	0.5
	Dade					1			1		1				3	0.2	0.1
XII	Monroe									1					1	1.3	0.0
STATE TOTAL		0	3	1	10	6	3	11	7	4	8	2	2		57	0.5	0.5

*1985-1987 Average rate

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



VIBRIO INFECTIONS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



VIBRIO INFECTIONS - Reported laboratory confirmed cases, by county, Florida, 1968

COUNTY	Vibrio Alginohidicus	Vibrio Cholerae 01	Vibrio Cholera Non-01	Vibrio Fluwellis	Vibrio Hollisae	Vibrio Mimicus	Vibrio Parahaemolyticus	Vibrio Vulnificus
Alachua								
Baker								
Bay	2							2
Bradford								
Brevard			1					
Broward			1	2			3	
Calhoun								
Charlotte								
Citrus						1	1	
Clay								
Collier							1	
Columbia								
Dade	1		1					1
De Soto								
Dixie								
Duval					1		1	2
Escambia								
Flagler								
Franklin	1							
Gadsden								1
Gulchiel								
Glades								
Gulf								
Hamilton								
Hardee								
Hendry								
Hernando								
Highlands								
Hillborough			1	1	1		4	
Holmes								
Indian River								
Jackson								
Jefferson								
Lafayette								
Lake								
Lee								2
Leon			8		1	3	1	2
Levy								
Liberty								
Madison								
Manatee								
Marion								
Martin						1		1
Monroe								1
Nassau								
Okaloosa			1				1	
Osceola								
Orange								
Ocala								
Palm Beach							1	1
Polk								
Putnam								
St. Johns								
St. Lucie								
Santa Rosa					1			
Sarasota								
Seminole								
Sumter								
Suwannee								
Taylor								
Union								
Volusia								1
Wakulla					1			
Walton								
Washington								
STATE TOTAL	4	0	12	3	5	5	14	14

SECTION 3:

Summary of Vaccine Preventable Diseases of Childhood



MEASLES (RUBEOLA)

In 1988, 170 cases of measles were reported to the state, which represents a 34.9% increase from the total number of cases reported in 1987 (126). The incidence in 1988 (1.4 per 100,000) increased 40% from the incidence in 1987 (1.0 per 100,000).

The greatest number of cases, 75 (44% of the state total), was reported in Orange County with eighty-three percent of the Orange County cases reported during January (35 cases), and February (27 cases). Dade County reported 35 cases from February through September with 21 cases (60%) reported in July. Pinellas County reported 21 cases from April through August with the majority (81%) reported in August.

Statewide, children aged 1-4 (115 cases) had the highest incidence of illness (17.2 per 100,000). The 5-9 year old age group contributed 20 cases (2.6 per 100,000) followed by the 15-19 year old age group contributing 12 cases (1.5 per 100,000).

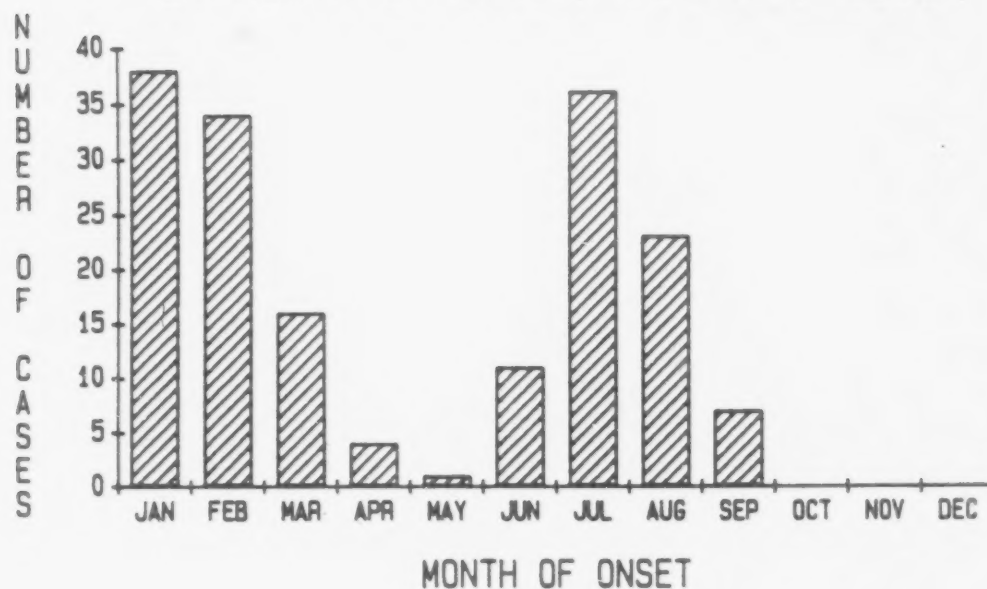
There were four main outbreaks in Florida this year. In Dade and Collier counties, from May through September, 37 cases of measles occurred, the majority in unimmunized preschool children on an intercounty Indian reservation. A second outbreak began in Polk County during June through September and again predominated in unimmunized preschool children. A third outbreak in Pinellas County, also during the summer, occurred in a private school among older children, almost all unimmunized. The largest outbreak in 1988 began in Orange County in a day care center, spread to neighboring Seminole County, and lasted from January through March.

MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY,
FLORIDA, 1986

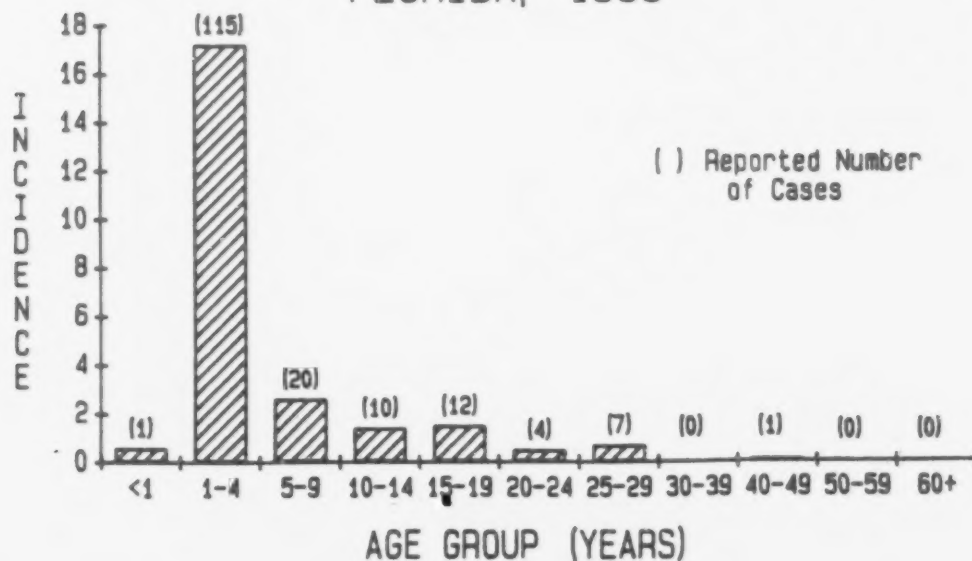
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa								1						1	1.5	0.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson	1													1	8.2	0.0
	Leon								1						1	0.6	2.7
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	4.8
	Washington															0.0	0.0
III	Alachua															0.0	2.6
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	51.7
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	3.6
	Hernando															0.0	0.4
	Lafayette															0.0	0.0
	Lake		1												1	0.7	0.0
	Levy															0.0	0.0
	Marion															0.0	0.6
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	6.1
IV	Baker															0.0	1.9
	Clay															0.0	5.1
	Duval															0.0	2.1
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	3.2
	Volusia															0.0	0.3
V	Pasco							1							1	0.4	0.1
	Pinellas				3			1	17						21	2.5	0.2
VI	Hardee															0.0	1.5
	Highlands															0.0	0.0
	Hillsborough			2											2	0.2	0.5
	Manatee															0.0	0.0
	Polk						1	10	1	2					14	3.5	0.4
VII	Brevard															0.0	0.0
	Orange	35	27	12				1							75	11.9	5.2
	Osceola															0.0	0.8
	Seminole	2	2	2											6	2.2	2.2
VIII	Charlotte															0.0	0.0
	Collier					1	3	1							5	3.7	0.3
	DeSoto															0.0	3.0
	Glades															0.0	0.0
	Hendry							1							1	3.9	0.0
	Lee									4					4	1.3	0.0
	Sarasota				1										1	0.4	0.0
IX	Indian River															0.0	0.0
	Martin															0.0	3.1
	Okeechobee															0.0	0.0
	Palm Beach		1												1	0.1	0.5
	St. Lucie															0.0	0.3
X	Broward															0.0	0.1
XI	Dade		3				7	21	3	1					35	1.9	6.0
	Monroe															0.0	0.0
STATE TOTAL		38	34	16	4	1	11	36	23	7	0	0	0	0	170	1.4	1.8

*1985 - 1987 Average rate

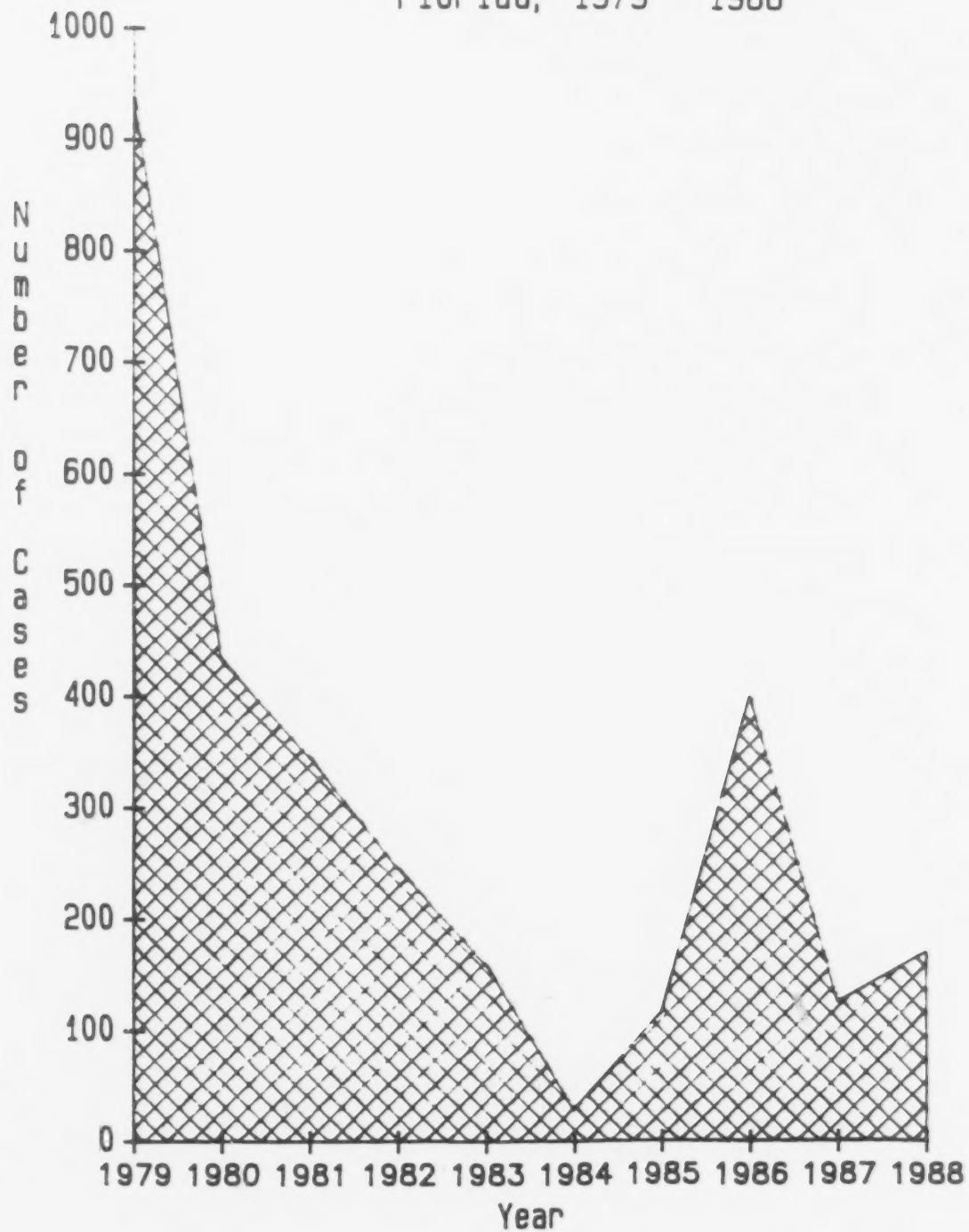
MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



MEASLES (RUBEOLA) - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



Reported Cases of Measles (Rubeola),
Florida, 1979 - 1988



MUMPS

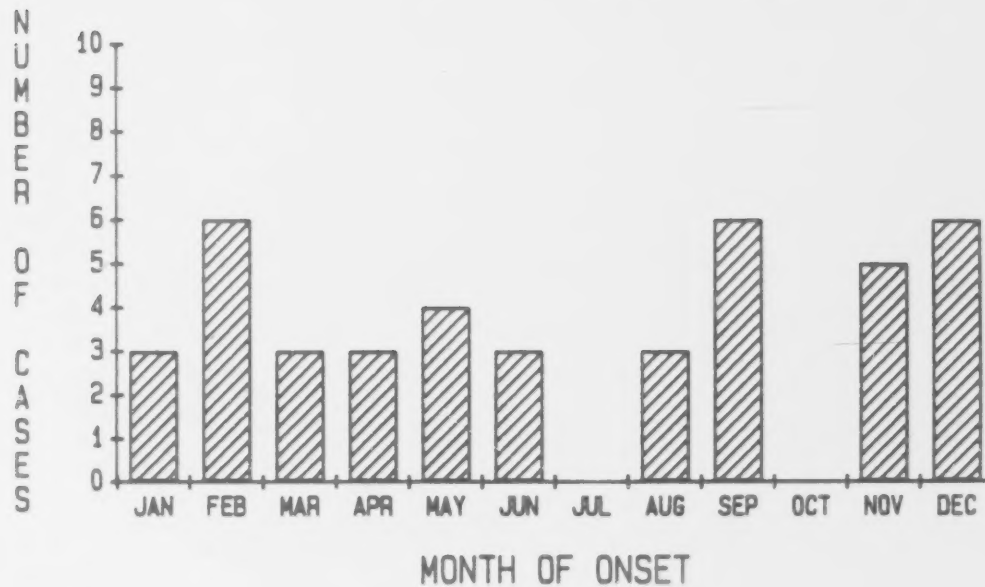
In 1988, 43 cases of mumps were reported, which represents a 35.8% decrease from the total number of cases reported in 1987 (67). No seasonal variation was noted. The incidence in 1988 (0.3 per 100,000) decreased from the incidence in 1987 (0.6 per 100,000). Children aged 5-9 had the highest incidence (2.1 per 100,000) with 16 cases. The 1-4 year old age group contributed 11 cases (1.6 per 100,000).

MUMPS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

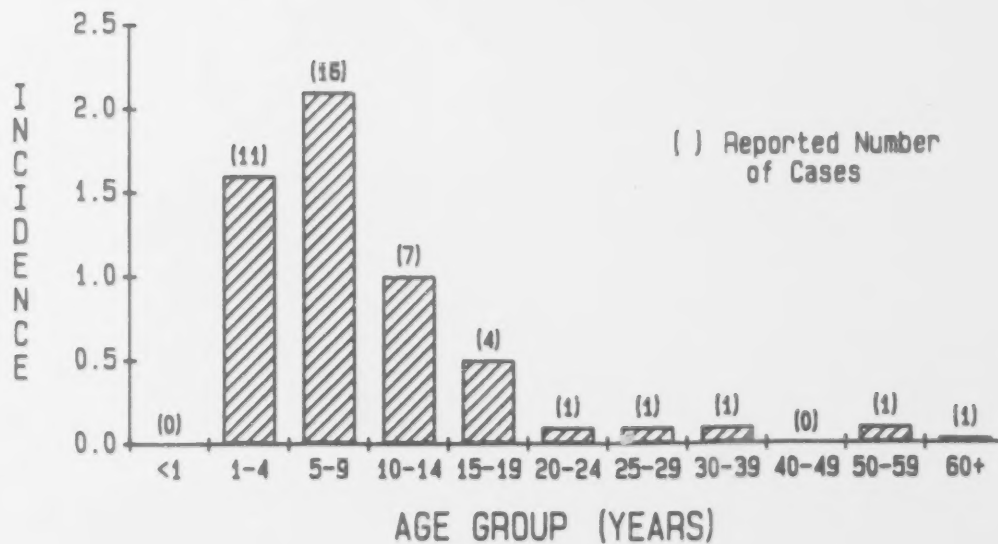
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.0
	Okaloosa			1						1			1		3	1.9	0.0
	Santa Rosa															0.0	1.0
	Walton															0.0	2.5
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	5.8
	Holmes															0.0	0.0
	Jackson															0.0	4.8
	Jefferson															0.0	0.0
	Leon															0.0	1.2
	Liberty															0.0	0.0
	Madison															0.0	6.3
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua	1													1	0.5	0.8
	Bradford															0.0	1.4
	Citrus															0.0	0.4
	Columbia															0.0	1.6
	Dixie															0.0	0.0
	Gilchrist															0.0	4.6
	Hamilton															0.0	0.0
	Hernando		1												1	1.2	5.4
	Lafayette															0.0	0.0
	Lake															0.0	0.5
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee					1									1	3.7	0.0
	Union															0.0	3.1
IV	Baker															0.0	1.9
	Clay												2		2	2.0	1.8
	Duval															0.0	0.1
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	0.9
	Volusia		2						1						3	0.9	2.1
V	Pasco															0.0	0.0
	Pinellas									2		1			3	0.4	0.3
VI	Hardee															0.0	1.5
	Highlands															0.0	0.0
	Hillsborough				1				1						2	0.2	0.7
	Manatee		1											1	2	1.1	0.4
VII	Polk	1	1	1	1		2		1	2					9	2.2	1.2
	Brevard															0.0	0.1
	Orange															0.0	0.0
	Osceola											1			2	2.1	1.2
	Seminole		1													0.0	1.4
VIII	Charlotte															0.0	0.4
	Collier															0.0	4.3
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	2.8
	Lee				1	1						1			3	1.0	0.2
	Sarasota															0.0	0.4
IX	Indian River															0.0	0.4
	Martin															0.0	0.4
	Okeechobee															0.0	0.0
	Palm Beach			1		2	1			1		2	2		9	1.1	1.1
	St. Lucie	1											1		2	1.5	0.5
X	Broward															0.0	0.1
XI	Dade															0.0	0.0
	Monroe															0.0	0.9
STATE TOTAL		3	6	3	3	4	3	0	3	6	0	5	6	1	43	0.3	0.5

*1985-1987 Average rate

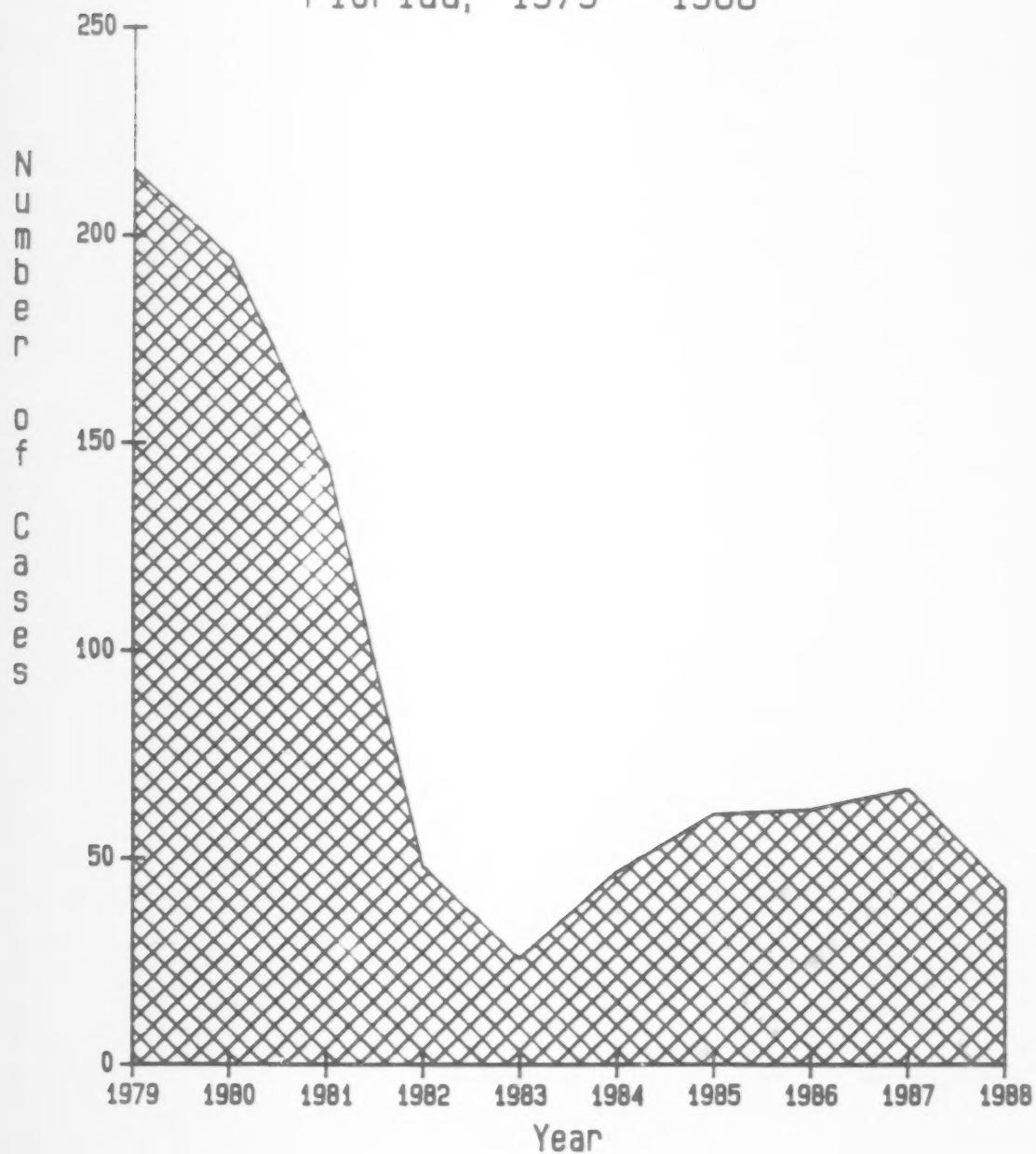
MUMPS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



MUMPS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



Reported Cases of Mumps,
Florida, 1979 - 1988



PERTUSSIS

In 1988, 72 cases of pertussis were reported, which represents a 35.8% increase from 1987 (53). The incidence in 1988 (0.6 per 100,000) increased 50 percent over the incidence in 1987 (0.4 per 100,000).

The highest number of cases reported (13) was in the month of July.

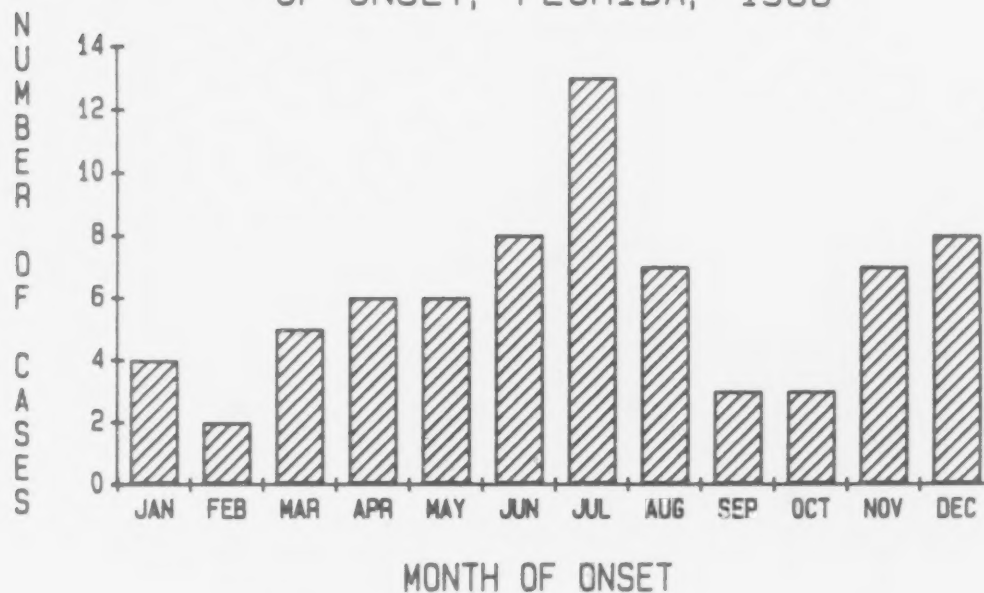
Children less than 1 year of age and children 1-4 years old both had 34 cases (19.1 per 100,000 and 5.1 per 100,000 respectively), followed by the 5-9 year old age group with three cases (0.4 per 100,000).

PERTUSSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

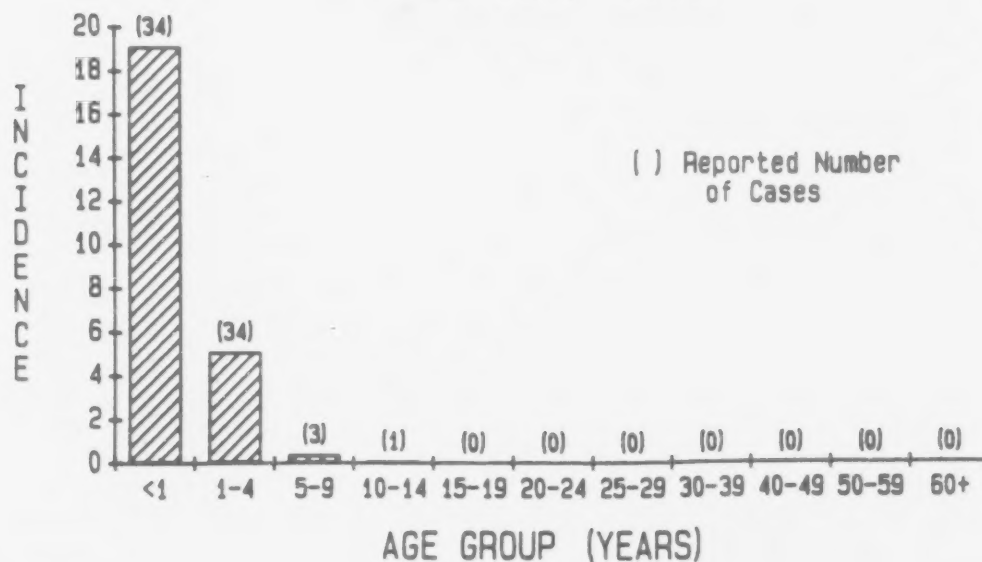
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.2
	Okaloosa															0.0	0.2
	Santa Rosa															0.0	0.0
	Walton															0.0	0.0
II	Bay							2							2	1.5	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon					2	2					1			5	2.8	0.8
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	2.1
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist											1			1	13.9	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.5
	Lafayette															0.0	0.0
	Lake															0.0	0.8
	Levy															0.0	0.0
	Marion															0.0	0.4
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	1.9
	Clay															0.0	2.6
	Duval	1	1	1	2				1	1		1	1		10	1.5	1.0
	Flagler															0.0	0.0
	Nassau												1		1	2.2	0.8
	St. Johns						1								1	1.3	0.9
	Volusia				1			2							3	0.9	0.9
V	Pasco					1	1				1				3	1.1	0.1
	Pinellas												2		2	0.2	0.4
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough								1			2	1		4	0.5	0.5
	Manatee															0.0	0.6
	Polk					2						1			3	0.7	3.2
VII	Brevard	1				1									2	0.5	0.7
	Orange															0.0	0.0
	Osceola															0.0	0.0
	Seminole															0.0	0.0
VIII	Charlotte															0.0	0.0
	Collier			1				1	3						5	3.7	0.8
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	4.2
	Lee												1		1	0.3	0.5
	Sarasota															0.0	0.1
IX	Indian River															0.0	0.0
	Martin															0.0	1.2
	Okeechobee															0.0	0.0
	Palm Beach												1		1	0.1	0.4
	St. Lucie							1		1					2	1.5	1.6
X	Broward															0.0	0.6
XI	Dade	2	1	3	2		4	7	2		2	1	1		26	1.4	0.4
	Monroe															0.0	2.3
STATE TOTAL		4	2	5	6	6	8	13	7	3	3	7	8	0	72	0.6	0.6

*1985-1987 Average rate

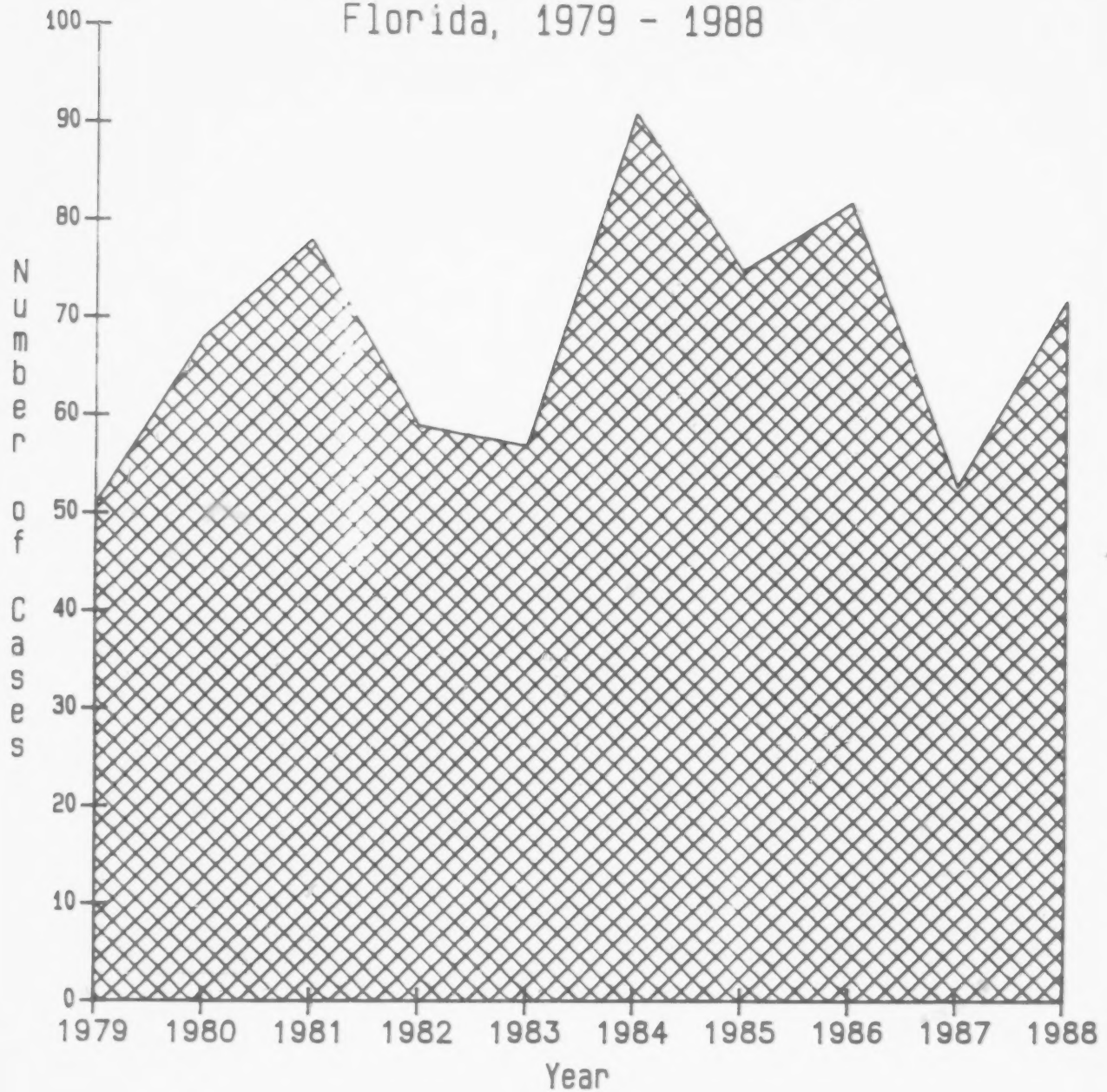
PERTUSSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



PERTUSSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



Reported Cases of Pertussis,
Florida, 1979 - 1988



RUBELLA

In 1988, three cases of rubella were reported to the state, which represents a 70% decrease from 1987 (10). The incidence in 1988 (0.02 per 100,000) decreased 80 percent from the incidence in 1987 (0.1 per 100,00).

Cases were reported in only two counties: Polk (one in February) and Pasco (two in April).

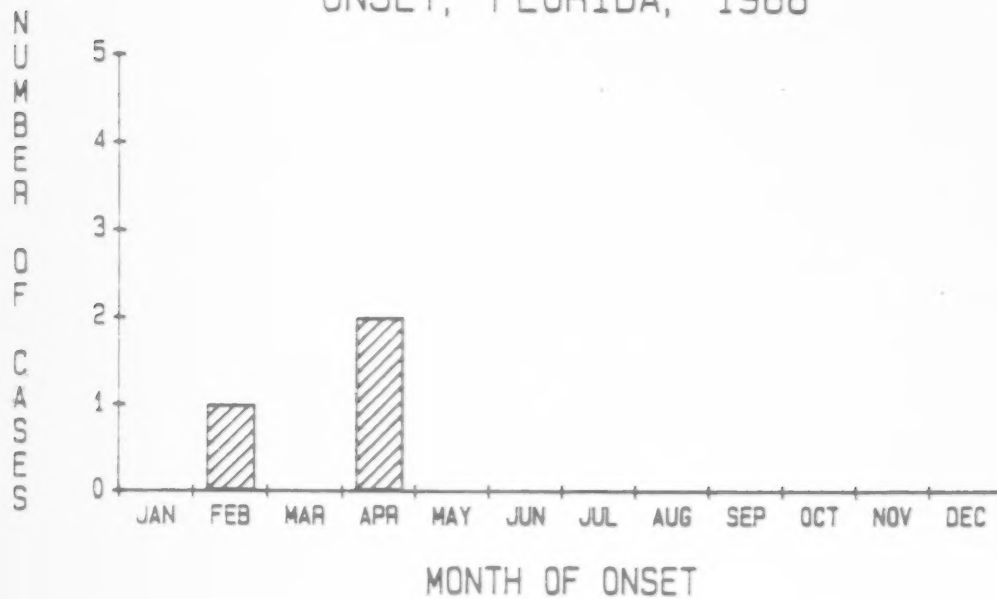
Children less than one year of age had the highest incidence, with one reported case (0.6 per 100,000). No congenital rubella has been reported since 1981.

RUBELLA - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1988

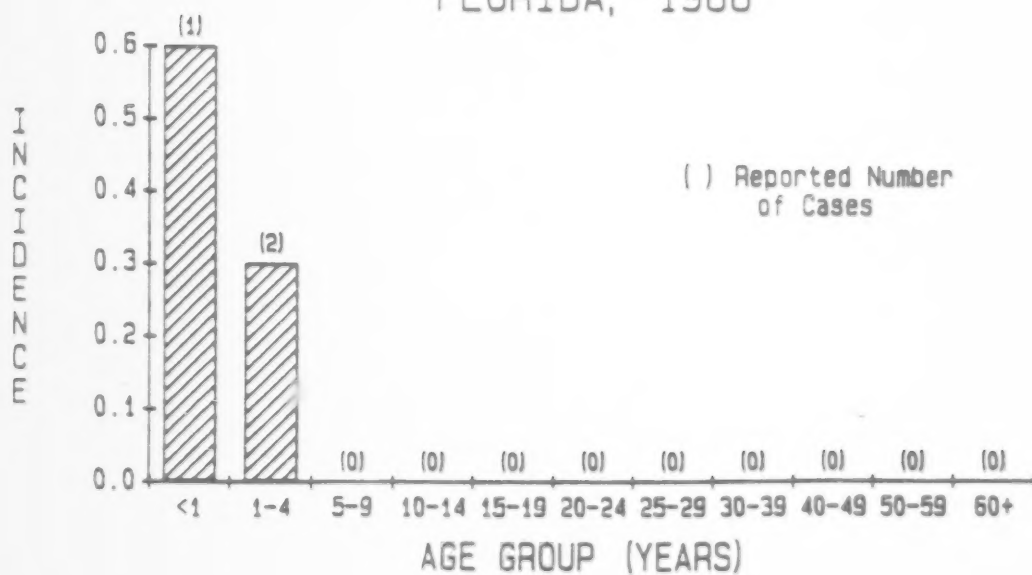
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	2.5
II	Bay															0.0	0.3
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.0
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.6
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Glachrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.0
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
IV	Baker															0.0	0.0
	Clay															0.0	0.0
	Duval															0.0	0.0
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	0.0
	Volusia															0.0	1.8
V	Pasco				2										2	0.8	0.0
	Pinellas															0.0	0.1
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough															0.0	0.0
	Manatee															0.0	0.4
VII	Polk		1												1	0.2	0.1
	Brevard															0.0	0.2
	Orange															0.0	0.1
	Osceola															0.0	0.0
	Seminole															0.0	0.4
VIII	Charlotte															0.0	0.0
	Collier															0.0	1.4
	DeSoto															0.0	1.5
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.0
IX	Sarasota															0.0	0.0
	Indian River															0.0	0.0
	Martin															0.0	0.0
	Okeechobee															0.0	0.0
	Palm Beach															0.0	0.4
X	St. Lucie															0.0	0.0
	Broward															0.0	0.0
XI	Dade															0.0	0.1
	Monroe															0.0	0.0
STATE TOTAL		0	1	0	2	0	0	0	0	0	0	0	0	0	3	0.02	0.2

*1985-1987 Average rate

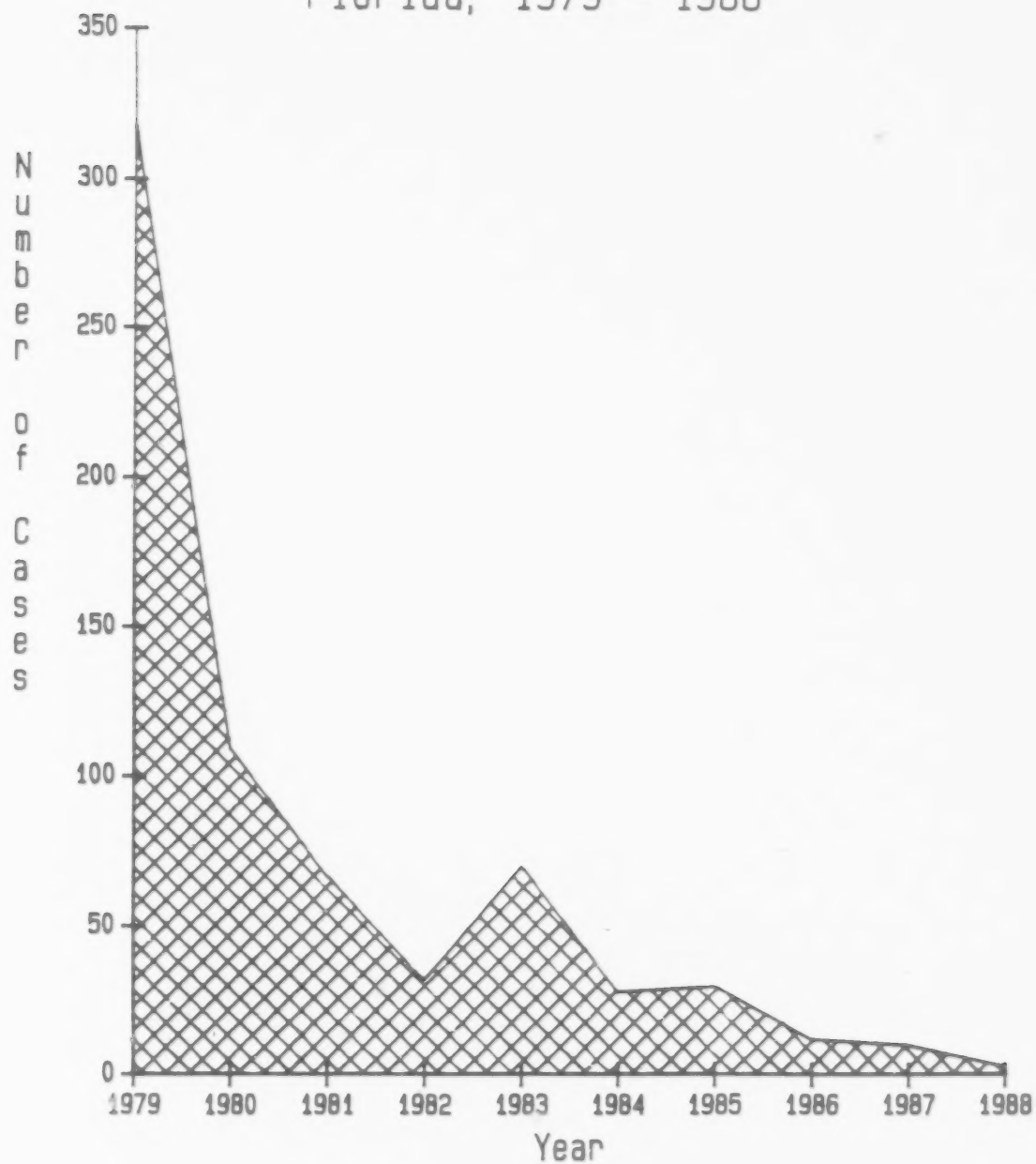
RUBELLA - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1988



RUBELLA - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1988



Reported Cases of Rubella,
Florida, 1979 - 1988



SECTION 4:

Analysis of Animal Rabies & Zoonotic Diseases



ANIMAL RABIES

Of the 4,737 animal specimens examined for rabies in 1988, 184 (3.9%) were positive in fluorescent rabies antibody (FRA) tests (Table 2). This represents a 65.8% increase from the total number of cases (111) reported for 1987.

Rabies positive animals were identified in 43 counties compared to 36 counties in 1987 (Table 3). Cases have occurred throughout the state with most being reported from the central, north and northwest counties.

Cases of rabies in raccoons (127) accounted for about 69% of the total cases reported and 16.7% of those examined were positive in FRA tests. Cases in raccoons occurred throughout the state with outbreaks reported in north (Okaloosa, Jackson, and Leon counties) and central (Alachua, Orange, Brevard, and St. Lucie counties) Florida as well as in Sarasota County on the west coast.

Cases of rabies in bats accounted for 17.4% of the total cases reported this year with 9.6% of all bats examined positive in FRA tests. Escambia County experienced an outbreak of bat rabies between July and September, and Duval County continued to see bat rabies throughout the year. A similar trend is seen in these same areas in 1986 and 1983, respectively.

Reported cases in other wildlife and domestic animals comprised 13.6% of all cases. There were no cases in dogs. However, 14 cats were positive in FRA tests. This represents a dramatic increase (180%) over the number of positive cats (5) reported for 1987. It also represents the highest number of rabid cats reported since 1948 when 22 cats were positive for rabies.

TABLE 1

ANIMAL RABIES - Laboratory Confirmed Cases by Species, Florida, 1979-1988

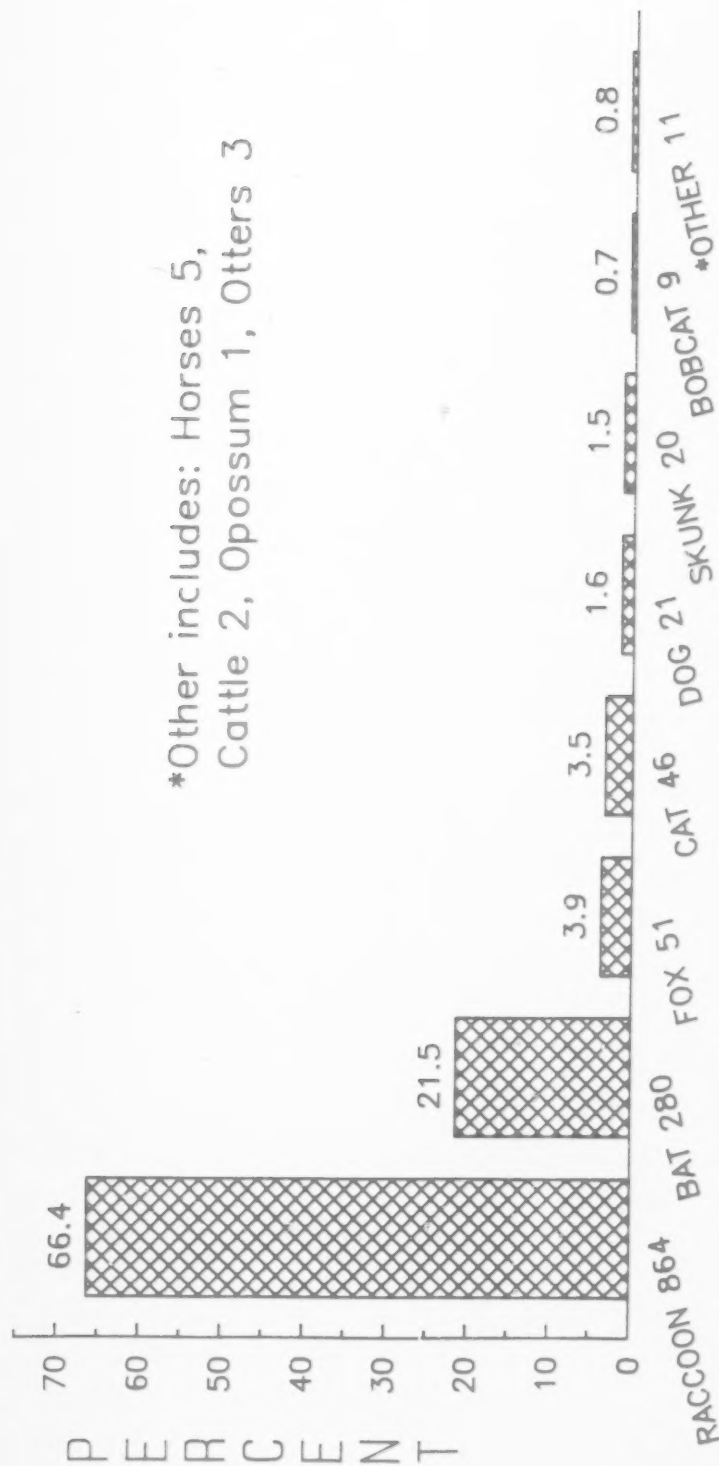
ANIMAL SPECIES	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
BAT	32	22	34	21	48	69	18	17	9	10
BOBCAT	1	0	0	3	2	1	0	0	2	0
CAT	14	5	7	1	1	2	1	7	3	5
CATTLE	0	0	0	0	0	1	0	0	1	0
DOG	0	3	4	2	1	1	2	1	4	3
FOX	8	8	5	6	3	0	6	7	3	5
HORSE	0	1	1	0	0	0	0	1	1	1
OPOSSUM	0	0	0	0	0	0	0	1	0	0
OTTER	1	0	1	0	1	0	0	0	0	0
RACCOON	127	71	128	122	92	56	51	79	84	54
SKUNK	1	1	3	4	1	1	2	3	3	1
STATE TOTAL	184	111	183	159	149	131	80	116	110	79

TABLE 2

ANIMAL RABIES - Laboratory Confirmed Cases and Specimens Examined, Florida, 1988

Species	Number Examined	Number and Percent () Positive	Percent of All Species Examined (N=4,737)	Percent of All Positive (N=184)
Cats	1,609	14 (0.87)	33.97%	7.61%
Dogs	942	0 (0.00)	19.89%	0.00%
Cattle	12	0 (0.00)	0.25%	0.00%
Horse	30	0 (0.00)	0.63%	0.00%
Other Domestic	<u>11</u> 2,604	<u>0</u> (0.00) 14 (0.54)	<u>0.23%</u> 54.97%	<u>0.00%</u> 7.61%
Raccoons	759	127 (16.73)	16.02%	69.02%
Bats	334	32 (9.58)	7.05%	17.39%
Skunks	57	1 (1.75)	1.20%	0.54%
Fox	109	8 (7.34)	2.30%	4.35%
Bobcat	9	1 (11.11)	0.19%	0.54%
Other Wild	<u>358</u> 1,626	<u>1</u> (0.28) 170 (10.46)	<u>7.56%</u> 34.33%	<u>0.54%</u> 92.39%
Rodents & Lagomorphs	507	0 (0.00)	10.70%	0.00%
TOTAL	4,737	184 (3.88)	100.00%	100.00%

ANIMAL RABIES FLORIDA, 1979-1988 TOTAL 1,302



*Other includes: Horses 5,
Cattle 2, Opossum 1, Otters 3

TABLE 3

ANIMAL RABIES - Reported laboratory confirmed cases, by county, Florida, 1979-1988

COUNTY	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979
Alachua	13	6	6	2			2	4	9	5
Baker	2		1			2			1	
Bay	1	2	7	5	2	1	1	2		3
Bradford							1		2	
Brevard	7	1	1	5	3	5	1			2
Broward					1			1		
Calhoun			1	1				1	2	
Charlotte		1	1	1						1
Citrus		1			1	1	1			
Clay	4	8	4	1		5	1	1		
Collier			1					1		2
Columbia	2		1	3	2		3	4	4	2
Dade				1			1		1	
DeSoto			2	1			1			1
Dixie	1							1		
Duval	10	12	11	4	4	22	4	6	9	4
Escambia	7	3	14	2	7	19	2	1	1	
Flagler	1		2	1				3	1	1
Franklin					1		1			
Gadsden	2	1	1	1	4	5	1	3	1	4
Gilchrist			1	1						
Glades	1									
Gulf			2	3	1					
Hamilton	1	1	8	7		1	1	2	1	1
Hardee	1			4		3		2	2	3
Hendry										
Hernando				2	1	1	2			
Highlands	1	2	2					1	2	
Hillsborough	6	1	4	5	1	3	1	3	2	5
Holmes	4	1	6	5	5	3		5	3	2
Indian River	1	2				1				
Jackson	10	4	10	13	3	3	2	7	1	3
Jefferson	1	2	2	6	4	2		2	4	2
Lafayette				1					4	1
Lake		2	4			1	3	3	3	2
Lee		3				1	2	7	2	3
Leon	11	3	3	20	27		12		13	
Levy	1		7	2			1			1
Liberty	2	1								
Madison	1	1	3	6	1		2	3	3	
Manatee										
Marion		3	6	2	1	6	1	7	4	5
Martin	7				1	2				
Monroe	4									
Nassau		1					4		1	1
Okaloosa	6	1	6	3	5	4	1	1	2	2
Okeechobee			2			1				
Orange	22	9	14	17	21	1	3	1	1	1
Osceola		6	3				2			
Palm Beach							2	1	1	
Pasco	3	1		2		1	1			
Pinellas										
Polk	9	11	21	19	33	9	3	10	2	
Putnam	1		1		1	1	2	3	2	1
St. Johns	3	2	7		1	1	2	2		
St. Lucie	9	12	1				2			
Santa Rosa	4	1	2		2	3	2			
Sarasota	12	1	4	1	1	3			5	2
Seminole	2	1	3	4	8	3	1	1	1	1
Sumter	3									
Suwannee	2	1	5	1				14	3	2
Taylor	1						1	1	1	
Union										
Volusia	1			1	1	1	3	7	7	3
Wakulla	1				1				1	2
Walton	1	2	1	1	2	2	2	3	3	2
Washington	2	1	2	4	3	1	2		3	2
STATE TOTAL	184	111	183	159	149	131	80	116	110	79

TABLE 4

ANIMAL RABIES - Laboratory Confirmed Cases, By County, By Species, By Month of Report, Florida, 1938

County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua		3 Rac			2 Rac		1 Bat	1 Rac	2 Rac	1 Bat	2 Rac	1 Rac	13
Baker				1 Fox			1 Cat						2
Bay			1 Rac										1
Bradford													
Brevard	1 Rac	1 Rac	1 Rac	1 Rac					1 Rac		1 Rac	1 Rac	7
Broward													
Calhoun													
Charlotte													
Citrus													
Clay	1 Rac				1 Rac		1 Fox		1 Bat				4
Collier													
Columbia							1 Otter	1 Rac					2
Dade													
DeSoto										1 Rac			1
Dixie													
Duval			1 Bat	1 Bat		1 Bat	1 Bat	1 Bat	1 Bat		1 Bat		10
Escambia						1 Rac	1 Fox	1 Rac	1 Bat		1 Bat		7
Flagler							1 Rac						1
Franklin													
Gadsden												2 Rac	2
Gilchrist													
Glenade											1 Rac		1
Gulf												1 Rac	1
Hamilton										1 Cat			1
Hardee													
Hendry													
Hernando													
Highlands	1 Rac												1
Hillsborough						1 Bat	1 Cat	1 Rac	1 Rac	1 Rac		1 Bat	6
Holmes			1 Rac	1 Rac			1 Rac				1 Rac		4
Indian River					1 Rac								1
Jackson	1 Rac	1 Rac	3 Rac			1 Rac	1 Rac			2 Rac			10
Jefferson											1 Bobcat		1
Lafayette													
Leake													
Lee													
Leon				1 Rac			1 Rac		2 Rac	1 Skunk	1 Rac	1 Rac	11
Levy								1 Rac					1
Liberia				1 Rac					1 Rac			1 Rac	2
Madison								1 Rac					1
Manatee							1 Rac						
Marion							1 Fox						
Martin					2 Rac	1 Rac	1 Rac			1 Rac		1 Cat	7
Monroe	1 Rac	2 Rac	1 Rac										4
Nassau													
Nesaw					2 Rac			1 Rac	1 Rac			1 Rac	6
Ocala			1 Rac										
Okechobee													
Orange		1 Rac		1 Rac	1 Rac	1 Rac	1 Bat	1 Cat	2 Rac	3 Rac	1 Bat	4 Rac	22
Osceola							1 Cat	3 Rac					
Palm Beach													
Pasco			1 Rac					2 Rac					3
Pinellas													
Polk						1 Cat		1 Cat 1 Fox			1 Bat		9
Pulham								3 Rac	1 Rac		1 Rac		1
St. Johns													
St. Lucie	2 Rac		1 Rac					1 Fox		1 Rac	2 Rac	2 Rac	9
Santa Rosa				1 Bat				1 Bat	1 Rac				4
Sarasota					1 Cat			2 Bat	2 Bat			1 Rac	12
Seminole			1 Rac		1 Rac		1 Rac	1 Rac	1 Rac			1 Bat	2
Sumter					1 Fox								3
Suwannee							1 Rac	2 Rac				1 Rac	2
Taylor								1 Rac					1
Union											1 Rac		1
Volusia													
Wakulla							1 Cat					1 Rac	1
Walton													
Washington						1 Rac	1 Fox						2
TOTAL	7	8	13	8	10	9	19	31	21	15	18	22	184

ZOONOTIC DISEASES

Brucellosis

Five cases of brucellosis were reported in 1988 compared with a mean of 8.8 cases for the previous 5 years (1983-1987). All cases had onset between March and September. All cases occurred in Jackson, Charlotte, Lake (2 cases) and Volusia counties. Four were male and one female. Two were 30-39, one was 15-19, one was 25-29 and one was 70-79. The probable source of exposure was documented in 4 of the 5 cases. Two of these were in individuals that handled or ate the meat of wild hogs and two had occupations on a pig farm.

Leptospirosis

Only one case of leptospirosis was reported in 1988 compared with a mean of 2.2 cases for the previous 5 years (1983-1987). This individual, a 13 year old male from Lee County had onset in November. As a farm worker, his exposure was presumed to be cattle or swine.

Psittacosis

Only one case of psittacosis was reported in 1988 compared to a mean of 5.8 cases for the previous 5 years (1983-1987). This individual, a 57 year old white female from Orange County, had onset in December. As an employee in the pet section of a department store, her exposure was presumed to be psittacine birds.

Rocky Mountain Spotted Fever

Five cases of rocky mountain spotted fever were reported during 1988 as compared with a mean of 5.2 cases reported during the previous 5 years (1983-1987). All five cases were white males from Escambia, Jackson, Citrus, Flagler and Jefferson counties. One was 1-4 years of age, one was 40-49 years of age, two were 50-59, and one was 60 to 69 years of age. Onset occurred between April and September. All five had known exposure to ticks prior to onset.

25

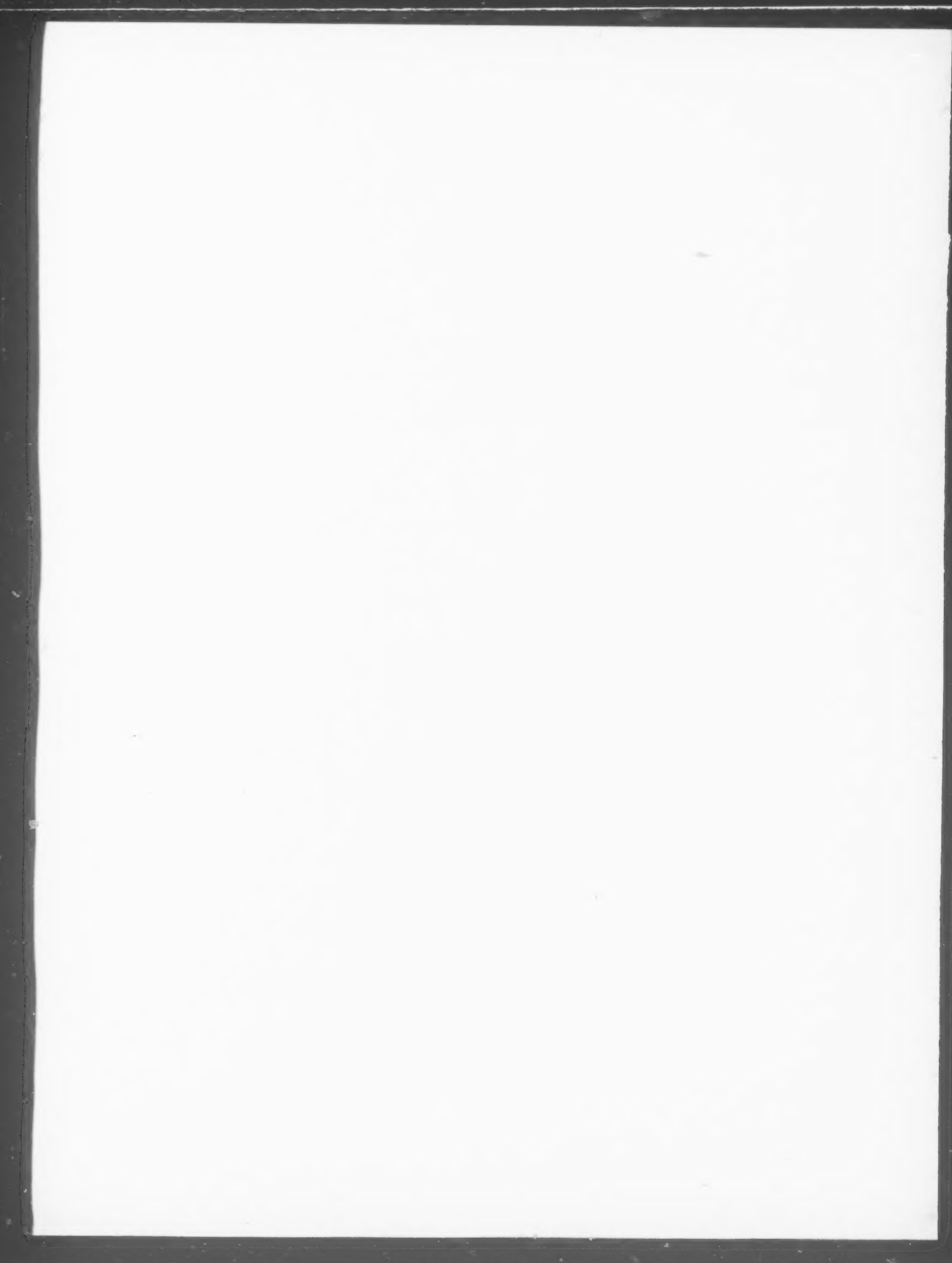
ZOONOTIC DISEASES - Reported Cases, By Disease, By County, Florida, 1988

	BRUCELLOSIS	LEPTOSPIROSIS	PSITTACOSIS	ROCKY MOUNTAIN SPOTTED FEVER
Alachua				
Baker				
Bay				
Bradford				
Brevard				
Broward				
Calhoun				
Charlotte	1			
Citrus				1
Clay				
Collier				
Columbia				
Dade				
DeSoto				
Dixie				
Duval				
Escambia				1
Flagler				1
Franklin				
Gadsden				
Gilchrist				
Glades				
Gulf				
Hamilton				
Hardee				
Hendry				
Hernando				
Highlands				
Hillsborough				
Holmes				
Indian River				
Jackson	1			1
Jefferson				1
Lafayette				
Lake	2			
Lee		1		
Leon				
Levy				
Liberty				
Madison				
Manatee				
Marion				
Martin				
Monroe				
Nassau				
Okaloosa				
Okeechobee				
Orange			1	
Osceola				
Palm Beach				
Pasco				
Pinellas				
Polk				
Putnam				
St. Johns				
St. Lucie				
Santa Rosa				
Sarasota				
Seminole				
Sumter				
Suwannee				
Taylor				
Union				
Volusia	1			
Wakulla				
Walton				
Washington				
STATE TOTAL	5	1	1	5



SECTION 5:

SUMMARY OF ACQUIRED IMMUNE DEFICIENCY SYNDROME



AIDS

Introduction

Each year, from 1980 through 1988, the number of reported AIDS cases in Florida has steadily risen. The Florida AIDS Program has witnessed continual growth in order to meet the challenges of this epidemic. Activities within Surveillance/Seroprevalence, Counseling and Testing and Partner Elicitation, HIV Education Prevention and, Patient Care were expanded due to increases in funding, personnel, and services. During 1988, studies to determine HIV seroprevalence were begun in selected clinical settings as well as in large populations of interest, such as all newborn children. Data from these serosurveys will be used to help estimate current and projected rates of persons infected with the AIDS virus in Florida. This information, along with case reports, will allow the AIDS Program to direct efforts at disease intervention and the care of patients with AIDS or HIV-related disease.

Morbidity

A total of 7,705 cases of AIDS were diagnosed between 1980 and 1988 and reported to the Florida Department of Health and Rehabilitative Services as of January 22, 1990. Of these, 5 cases were diagnosed in 1980, 17 cases were diagnosed in 1981, 84 in 1982, 222 in 1983, 431 in 1984, 820 in 1985, 1,281 in 1986, 2,139 in 1987 and 2,706 in 1988.

Age, Race, and Sex

For cases of AIDS reported in 1988, the distribution by age group is shown in Table 1. The greatest number of cases occurred in the 30-39 year age group (44%), followed by those 20-29 years of age (22%), and those aged 40-49 years (21%). Sixty-four pediatric cases (<13 years of age) were diagnosed during this time period. Of these 64 reported cases, 33 (52%) were under the age of one.

Of the total adult cases (2,642) diagnosed in 1988, 2,243 (85%) were male, and 399 (15%) were female. For all cases diagnosed in 1988, 1,326 (49%) were white, 1,014 (37%) were black, 360 (13%) were Hispanic, and 6 were other race or unknown (Table 2).

Risk Category

Data by risk category for the cases diagnosed in 1988 are shown in Table 3. The greatest proportion of adult cases were identified as homosexual or bisexual men (52%), followed by intravenous drug users (20%). Heterosexual contact was the next most frequent mode of transmission, accounting for 325 (12%) of the adult cases reported. Among the 64 pediatric cases, most (94%) had a parent with AIDS or at risk for AIDS and 2 (3%) acquired the disease through infected blood or blood products.

Disease Group and Mortality

In 1988, the greatest proportion of cases were diagnosed with Pneumocystis carinii pneumonia (PCP), accounting for 52% of the total. The most common neoplastic disease occurring in AIDS cases, Kaposi's Sarcoma (KS), accounted for 5% of the total (Table 4). More than half (53%) of the 1988 cases are reported to have died.

Geographic Distribution

Among the 67 counties, Dade County had the greatest number of cases diagnosed in 1988 with a total of 801 (30%), followed by the counties of Broward and Palm Beach which reported 433 (16%) and 277 (10%), respectively. A total of 54 counties throughout the state had at least one case of diagnosed AIDS during this period (Table 5). However, the majority (60%) were residents of South Florida at time of diagnosis (Districts IX, X, or XI). Incidence per 100,000 population is also shown for each county reporting AIDS cases. Monroe County reported the highest incidence with 91.26 cases per 100,000 population.

TABLE 1**AIDS cases by age group, Florida, 1988**

Age	Number (%)	
< 1	33	(1)
1 - 4	24	(1)
5 - 12	7	(0)
13 - 19	12	(0)
20 - 29	587	(22)
30 - 39	1,183	(44)
40 - 49	575	(21)
50+	285	(11)
TOTAL	2,706	(100)

TABLE 2**AIDS cases by race/ethnicity, Florida, 1988**

Race/Ethnicity	Adult/ Adolescent Cases (%)	Pediatric Cases (%)	Total Cases (%)
White, Not Hispanic	1,320 (50)	6 (9)	1,326 (49)
Black, Not Hispanic	962 (36)	52 (81)	1,014 (37)
Hispanic	354 (13)	6 (9)	360 (13)
Other	5 (0)	0 (0)	5 (0)
Unknown	1 (0)	0 (0)	1 (0)
TOTAL	2,642 (100)	64 (100)	2,706 (100)

TABLE 3

AIDS cases by patient group, Florida, 1988

Patient Groups	Adult/Adolescent		Total (%)
	Males (%)	Females (%)	
Homosexual / Bisexual (Ho/Bi)	1,373 (61)	0 (0)	1,373 (52)
Intravenous (IV) Drug User	344 (15)	193 (48)	537 (20)
Ho/Bi IV Drug User	168 (7)	0 (0)	168 (6)
Hemophiliac	10 (0)	1 (0)	11 (1)
Heterosexual contact	179 (8)	146 (37)	325 (12)
Transfusion with blood/products	48 (2)	34 (9)	82 (3)
None of the above / Other	121 (5)	25 (6)	146 (6)
Total	2,243 (100)	399 (100)	2,642 (100)
Patient Groups	Pediatric		
	Males (%)	Females (%)	Total (%)
Hemophiliac	1 (4)	0 (0)	1 (2)
Parent at risk/has AIDS/HIV	24 (92)	36 (95)	60 (94)
Transfusion with blood/products	0 (0)	2 (5)	2 (3)
None of the above / Other	1 (4)	0 (0)	1 (2)
Total	26 (100)	38 (100)	64 (100)

TABLE 4

AIDS cases by disease category, Florida, 1988

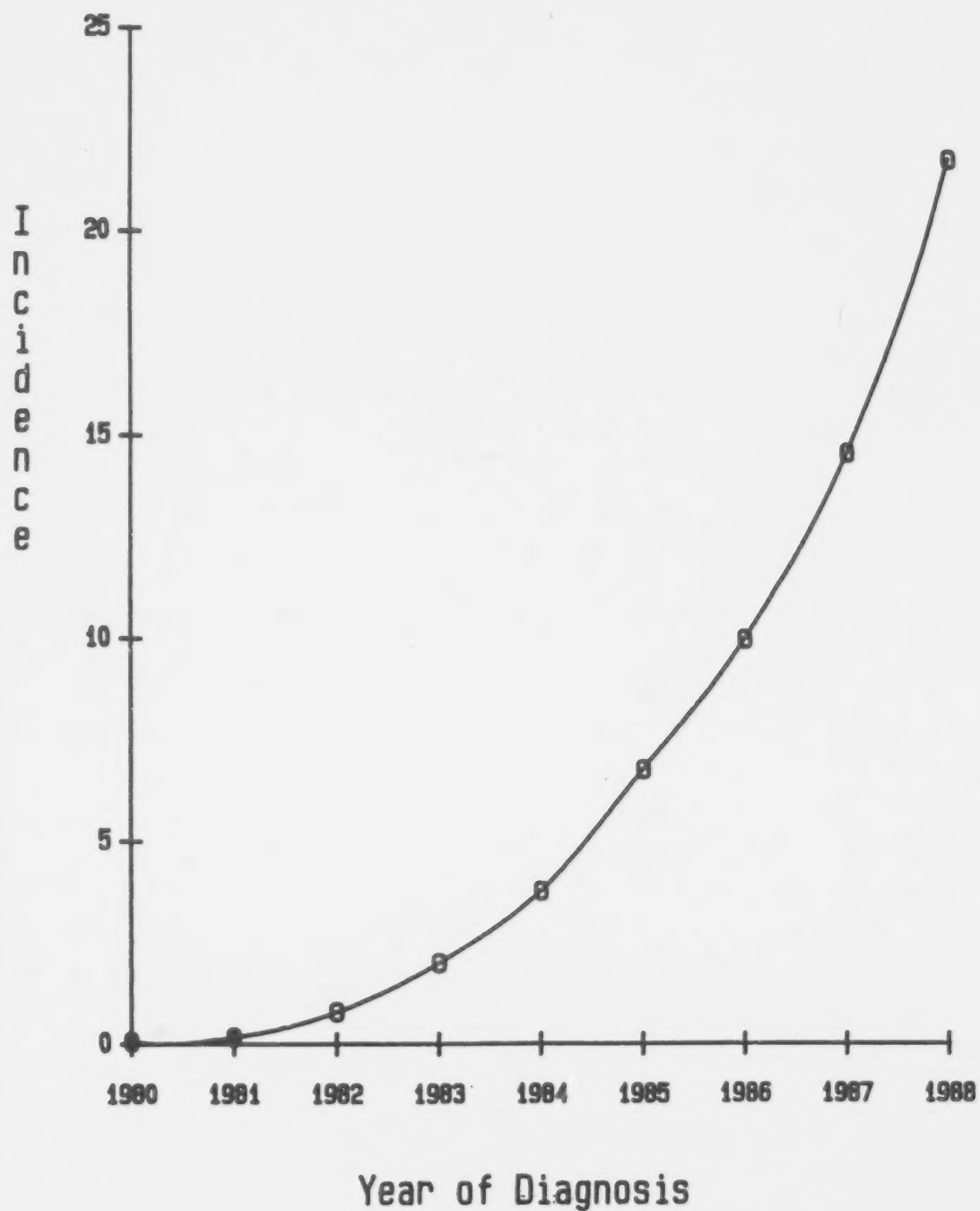
Disease Category	<u>Adult/Adolescent</u>		<u>Pediatric</u>	
	Cases (%)	Deaths (%)	Cases (%)	Deaths (%)
PCP	1,394 (53)	774 (56)	18 (28)	13 (72)
Other Disease (non PCP)	1,126 (43)	596 (53)	45 (70)	20 (44)
KS Alone	122 (5)	43 (35)	1 (2)	1 (100)
Total	2,642 (100)	1,413 (53)	64 (100)	34 (53)
Disease Category	<u>Total</u>			
	Cases (%)	Deaths (%)		
PCP	1,412 (52)	787 (56)		
Other Disease (non PCP)	1,171 (43)	616 (53)		
KS Alone	123 (5)	044 (36)		
Total	2,706 (100)	1,447 (53)		

TABLE 5

AIDS cases by County of Residence at Onset of Illness, Florida, 1988

District / County		Number Reported	Percent of Total	Rate Per 100,000
I	Escambia	34	(1.26)	11.85
	Okaloosa	3	(0.11)	1.91
	Walton	1	(0.04)	3.47
II	Bay	2	(0.07)	1.47
	Gadsden	2	(0.07)	4.25
	Jefferson	3	(0.11)	24.74
	Leon	15	(0.55)	8.26
	Taylor	1	(0.04)	5.23
	Washington	1	(0.04)	6.44
III	Alachua	21	(0.78)	11.37
	Bradford	1	(0.04)	4.04
	Citrus	3	(0.11)	3.45
	Columbia	1	(0.04)	2.35
	Gilchrist	1	(0.04)	13.88
	Hernando	1	(0.04)	1.15
	Lafayette	2	(0.07)	39.02
	Lake	7	(0.26)	4.87
	Levy	1	(0.04)	4.09
	Marion	12	(0.44)	6.50
	Putnam	3	(0.11)	4.63
	Sumter	1	(0.04)	3.30
	Suwannee	4	(0.15)	14.93
IV	Baker	4	(0.15)	21.09
	Clay	9	(0.33)	8.88
	Duval	132	(4.88)	19.29
	Flagler	1	(0.04)	4.79
	Nassau	3	(0.11)	6.50
	St. Johns	6	(0.22)	7.52
	Volusia	43	(1.59)	12.48
V	Pasco	18	(0.67)	6.78
	Pinellas	136	(5.03)	16.08
VI	Hardee	3	(0.11)	13.30
	Highlands	1	(0.04)	1.51
	Hillsborough	157	(5.80)	18.87
	Manatee	19	(0.70)	10.15
	Polk	46	(1.70)	11.46
VII	Brevard	30	(1.11)	7.69
	Orange	141	(5.21)	22.36
	Osceola	5	(0.18)	5.27
	Seminole	15	(0.55)	5.55
VIII	Charlotte	4	(0.15)	4.26
	Collier	17	(0.63)	12.70
	DeSoto	3	(0.11)	12.74
	Hendry	8	(0.30)	31.35
	Lee	83	(3.07)	26.71
	Sarasota	28	(1.03)	10.76
IX	Indian River	7	(0.26)	7.98
	Martin	3	(0.11)	3.21
	Okeechobee	8	(0.11)	27.53
	Palm Beach	277	(10.24)	33.46
	St. Lucie	25	(0.92)	18.47
X	Broward	433	(16.00)	35.84
XI	Dade	801	(29.60)	43.79
	Monroe	70	(2.59)	91.26
Department of Corrections		47	(1.74)	-----
Unknown County		3	(0.11)	-----
TOTAL		2706	(100.0)	21.70

AIDS Incidence per 100,000 Population
by Year of Diagnosis, Florida, 1980 - 1988



SECTION 6:

SUMMARY OF SEXUALLY TRANSMITTED DISEASES

Prepared by Sexually Transmitted Disease Program
Jack E. Wroten, Chief



SYPHILIS

Syphilis is a bacterial disease caused by spirochete, Treponema pallidum, which gains entry into the body through either mucous membranes or skin during intercourse. Except when transmitted by a pregnant woman to her fetus, the disease is almost exclusively sexually transmitted. Infectious syphilis (primary and secondary) is characterized by lesions on the mucous membranes. Early syphilis and late syphilis take the form of manifestations of the bones, skin, central nervous system, heart and other vital organs which may contribute to the patient's death. Syphilis is a serious but treatable illness and despite great efforts, it is increasing in the state at an alarming rate.

Morbidity Trends

In 1988, 19,265 reports of syphilis represented a dramatic increase (23.0%) over the 15,666 cases reported in 1987. In just two years, total reported syphilis has risen 104.4%; more than double the 1986 case level. Florida syphilis levels for 1988 are the highest in nearly thirty years with an incidence of 154.5 cases per 100,000 population (Table 1). Florida also ranks first in the nation for reported cases of infectious syphilis, accounting for more than one-fifth (20.1%) of the nation's cases. Since 1987 significant increases have occurred for all stages of syphilis (23.0% overall);

primary and secondary (12.6%); early latent (44.3%); late and late latent (8.1%); and congenital (102.7%).

Primary and secondary (P&S) syphilis is the early infectious stage of the disease. In 1988, 8,378 cases of P&S syphilis were reported. This represents 43.5% of all syphilis reported with an incidence of 67.2 cases per 100,000 population. The majority of the 8,378 cases of P&S syphilis were reported in persons 25-29 and accounted for 23.5% (1,968 cases), those 20-24, 20.8% (1,744 cases), and those 30-34, 18.2% (1,527 cases).

Additional analysis of the data indicates that males accounted for 4,996 (59.6%) of the P&S syphilis reports for a male to female ratio of 1:1.4. The racial distribution of all reported P&S syphilis cases indicates that 82.7% of the cases occurred in blacks, 10.4% were white, and 6.8% were Hispanic. Furthermore, black males comprised 48.3% of the infectious cases and black females represented 34.4% of the infectious cases. White males, however, only accounted for 5.9% and only 4.5% of white females were reported with the infectious disease. Of the cases reported in 1988, only 529 (6.3%) of the infectious cases were reported by private health care providers. Public physicians, public hospitals and public institutions reported the remaining 7,849 cases (93.7%).

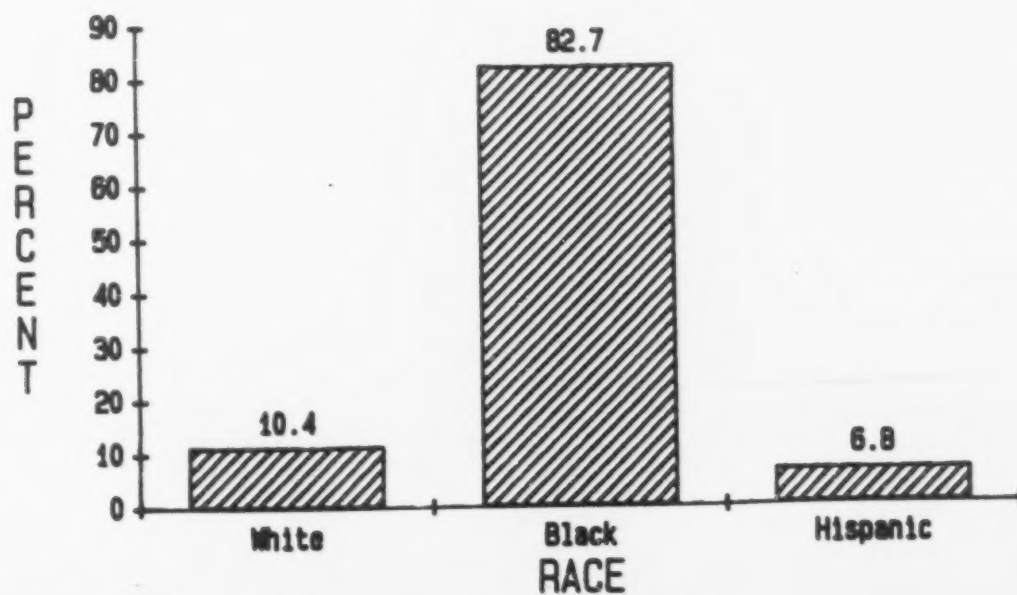
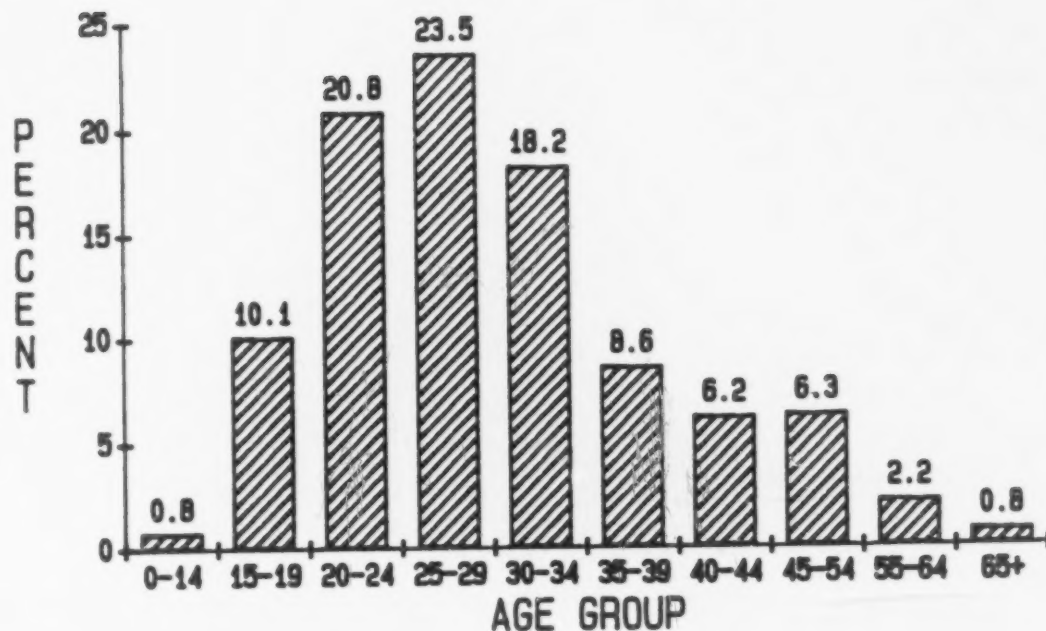
Since 1986, Florida has experienced sharp increases in the number of reported cases of congenital syphilis. Congenital syphilis in 1987 totaled 110 cases compared to 223 cases reported in 1988, or a 102.7% increase during this period (Table 1). In 1988, Florida ranked number one in the country for reported cases of congenital syphilis. A review of the 223 congenital cases reveals that 85% of

these cases were reported from Dade, Broward and Palm Beach counties, where 44.5% of early syphilis was also reported. The majority of the congenital cases occurred among minorities and most of the mothers received no prenatal care prior to delivery. With proper prenatal care many of these cases could have been prevented.

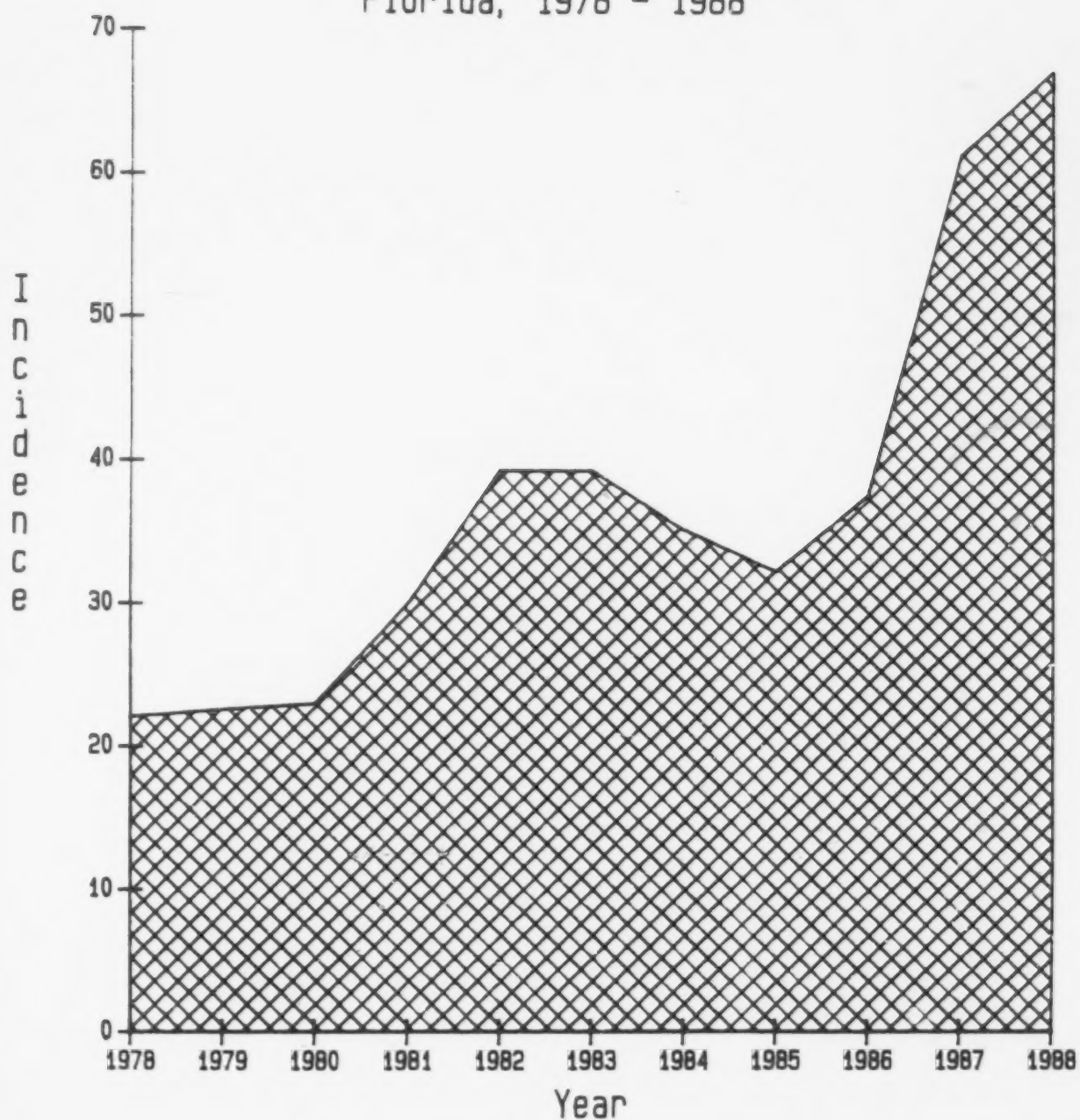
Table 1. ⁺³⁰
Florida Syphilis Cases and Incidence Rates, 1980 - 1988

Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital	
		CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES
1988	12,468,600	19265	154.5	8378	67.2	7539	60.5	3125	15.1	223	1.8
1987	12,112,800	15666	129.3	7440	61.4	5224	43.1	2892	23.9	110	0.9
1986	11,744,900	9427	80.3	4344	37.6	3107	26.9	1876	16.2	100	0.9
1985	11,377,318	7969	70.0	3679	32.3	2504	22.0	1755	15.4	31	0.3
1984	11,015,061	8314	75.5	3876	35.2	2812	25.5	1596	14.5	30	0.3
1983	10,645,793	8404	79.0	4179	39.3	2501	23.5	1699	16.0	25	0.2
1982	10,555,498	7936	75.2	4149	39.3	1884	17.9	1895	18.0	8	0.1
1981	10,108,564	5971	59.1	3036	30.3	1376	13.6	1552	15.4	7	0.1
1980	9,813,706	4384	44.7	2257	23.0	1066	10.9	1058	10.8	3	0.0

PRIMARY & SECONDARY SYPHILIS PERCENT OF REPORTED CASES BY AGE & RACE, FLORIDA, 1988



Primary and Secondary Syphilis
Incidence per 100,000 Population,
Florida, 1978 - 1988



**Reported Cases of Primary & Secondary SYPHILIS by County,
Florida, 1987 vs. 1988**

	1988	1987	%Change		1988	1987	%Change
District I				District V			
Escambia	37	34	8.8%	Pasco	12	10	20.0%
Okaloosa	20	5	300.0%	Pinellas	396	270	46.7%
Santa Rosa	0	2	-100.0%	District I			
Walton	0	1	-100.0%	Hardee	4	3	33.3%
District II				Highlands	13	25	-48.0%
Bay	41	12	241.7%	Hillsborough	541	608	-11.0%
Calhoun	5	1	400.0%	Manatee	104	94	10.6%
Franklin	2	1	100.0%	Polk	221	208	6.3%
Gadsden	158	72	119.4%	District I			
Gulf	2	0	***	Brevard	93	119	-21.8%
Holmes	0	0	***	Orange	289	510	-43.3%
Jackson	5	5	0.0%	Osceola	9	20	-55.0%
Jefferson	10	1	900.0%	Seminole	84	62	35.5%
Leon	295	242	21.9%	District VIII			
Liberty	2	0	***	Charlotte	5	7	-28.6%
Madison	16	8	100.0%	Collier	73	68	7.4%
Taylor	10	9	11.1%	DeSoto	25	10	150.0%
Wakulla	5	4	25.0%	Glades	5	1	400.0%
Washington	5	9	-44.4%	Hendry	38	27	40.7%
District III				Lee	218	174	25.3%
Alachua	100	96	4.2%	Sarasota	120	41	192.7%
Bradford	2	10	-80.0%	District IX			
Citrus	2	1	100.0%	Indian River	71	36	97.2%
Columbia	5	10	-50.0%	Martin	37	19	94.7%
Dixie	0	0	***	Okeechobee	17	12	41.7%
Gilchrist	0	1	-100.0%	Palm Beach	756	842	-10.2%
Hamilton	10	3	233.3%	St. Lucie	173	161	7.5%
Hernando	5	4	25.0%	District X			
Lafayette	0	2	-100.0%	Broward	1081	1241	-12.9%
Lake	29	28	3.6%	District I			
Levy	2	4	-50.0%	Dade	1919	1723	11.4%
Marion	103	26	296.2%	Monroe	14	21	-33.3%
Putnam	51	35	45.7%	Institutions	557	72	673.6%
Sumter	17	7	142.9%	STATE TOTAL	8378	7440	12.6%
Suwannee	0	0	***				
Union	0	2	-100.0%				
District IV							
Baker	1	3	-66.7%				
Clay	2	4	-50.0%				
Duval	363	275	32.0%				
Flagler	5	2	150.0%				
Nassau	2	3	-33.3%				
St. Johns	16	24	-33.3%				
Volusia	175	110	59.1%				

GONORRHEA

Gonorrhea is caused by a bacteria called Neisseria gonorrhoeae and it is transmitted from mucous membranes of infected persons almost exclusively from sexual activity. This disease produces urethritis in men and women and in newborn babies it causes a severe inflammation of the eyes called ophthalmia. Symptoms differ between the sexes. Men usually experience pain and discharge, in females it may go unnoticed. Gonorrhea is a treatable disease but, if left untreated, will cause serious damages.

Morbidity Trends

In 1988, 60,714 reports of gonorrhea represented a 2.0% decrease over the 62,944 cases reported in 1987. The gonorrhea incidence, however, remains exceptionally high at 486.9 per 100,000 population compared to the national average of 298.7 per 100,000 and the 1990 objective of 280 per 100,000 population. Gonorrhea cases in Florida have consistently remained above the 60,000 case level over the past ten years, excluding a short decline from 1983-1985. Cases reported during the last decade have ranged from a high of 67,443 in 1986 to a low of 51,212 in 1984. The encouraging aspect of the gonorrhea trend is that the incidence per 100,000 population is generally in decline. This is due in part to vigorous population growth, which has increased on average 364,561 per year for the past five years. The 1988 incidence (486.9) is a decrease of

6.3% from the 1987 incidence of 519.6 cases per 100,000 population. The screening program to detect asymptomatic females has also had an impact on the gonorrhea case rate trend.

The majority of the gonorrhea cases were reported in persons 20-24 years old. Those 20-24 accounted for 28.0% (17,172 cases); those 25-29, 20.6% (12,478 cases). Additionally, males accounted for 36,424 (60.0%) and females accounted for 24,290 (40.0%) of the reported cases. The racial distribution shows that 80.0% of the cases occurred among non-white persons, and 20.0% among white persons. Closer analysis shows that only 22.9% (13,890 cases) of the gonorrhea cases were reported by private health care providers while public physicians, public hospitals and public institutions reported the majority (77.1%) of cases.

In summary, the typical infected person is male, between 20-29 years of age (81.4% of total males), non-white (82.4% of total males), heterosexual, and resides in the intercity neighborhoods, where morbidity is highest.

There were 4,598 reported cases of penicillinase-producing Neisseria gonorrhoeae (PPNG) for 1988 as compared to 3,194 reported in 1987. Florida has been actively involved in the battle to reduce the incidence of PPNG since 1976 (The 1987 morbidity represented the beginning of a decrease in PPNG since Florida's efforts began over 10 years ago. Florida morbidity for 1988 indicates that this trend will continue). Florida, however, still ranks number four in the nation for reported cases of antibiotic-resistant gonorrhea (37.5 cases per 100,000 population). PPNG

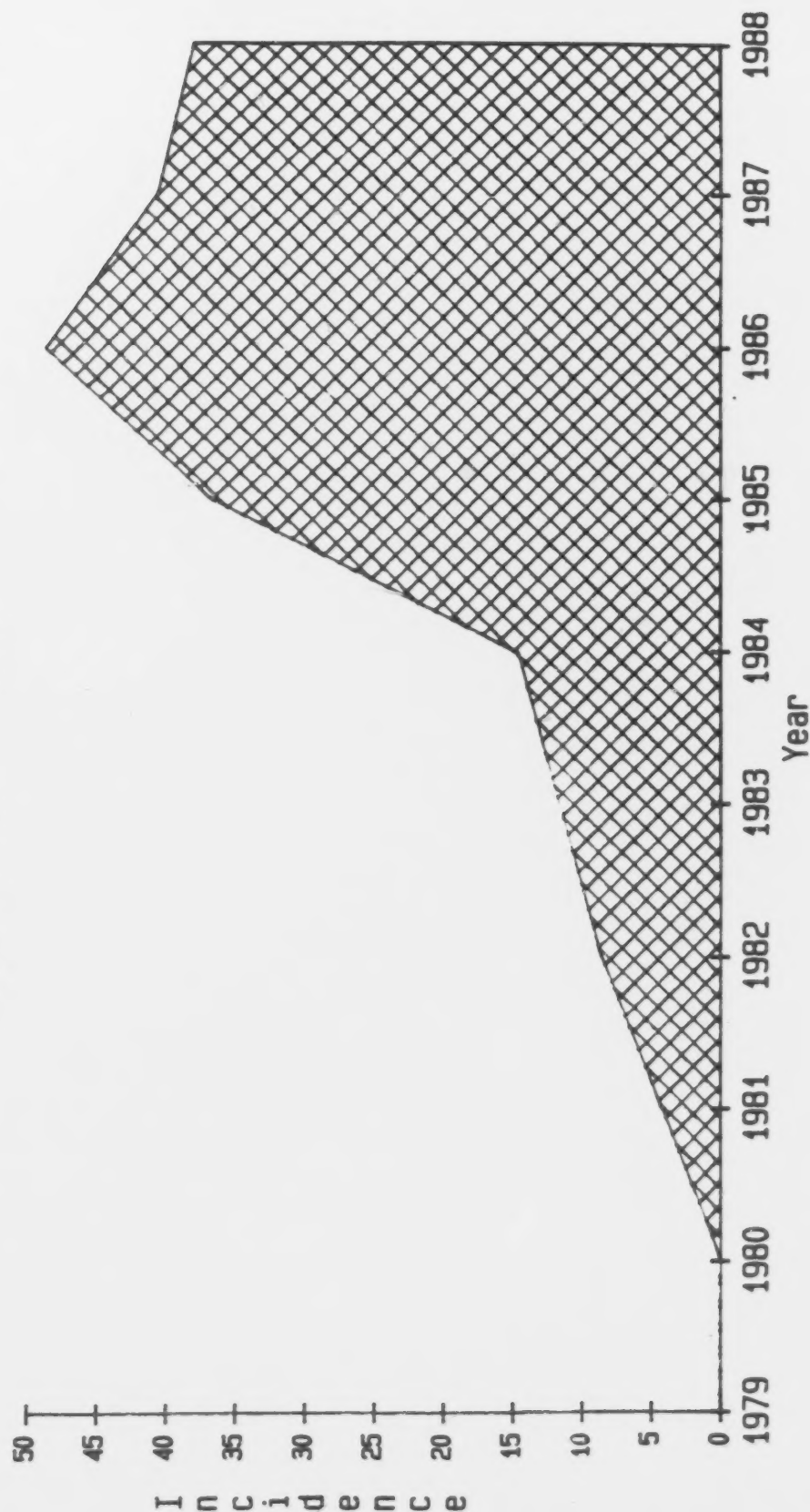
as a percent of gonorrhea in Florida is 7.6%, well above the national average. The top three counties with PPNG infection for 1988 are Dade (1,108 cases), Broward (709 cases) and Hillsborough (611 cases) counties. Together these counties represent 52.8% of the PPNG in Florida with Hillsborough County experiencing the highest percentage. Dade and Broward counties both experienced a slight decline in the number of reported PPNG cases.

REPORTED SYPHILIS AND GONORRHEA CASES AND RATES PER 100,000 POPULATION, FLORIDA, 1957 - 1988

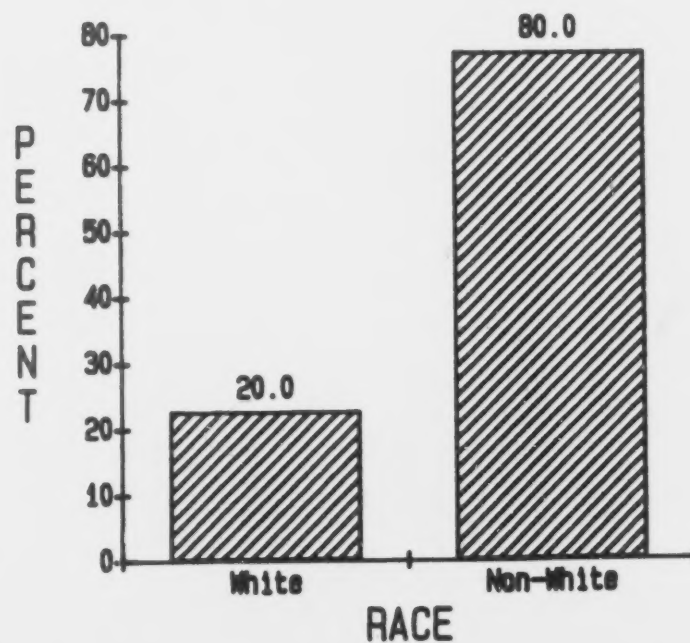
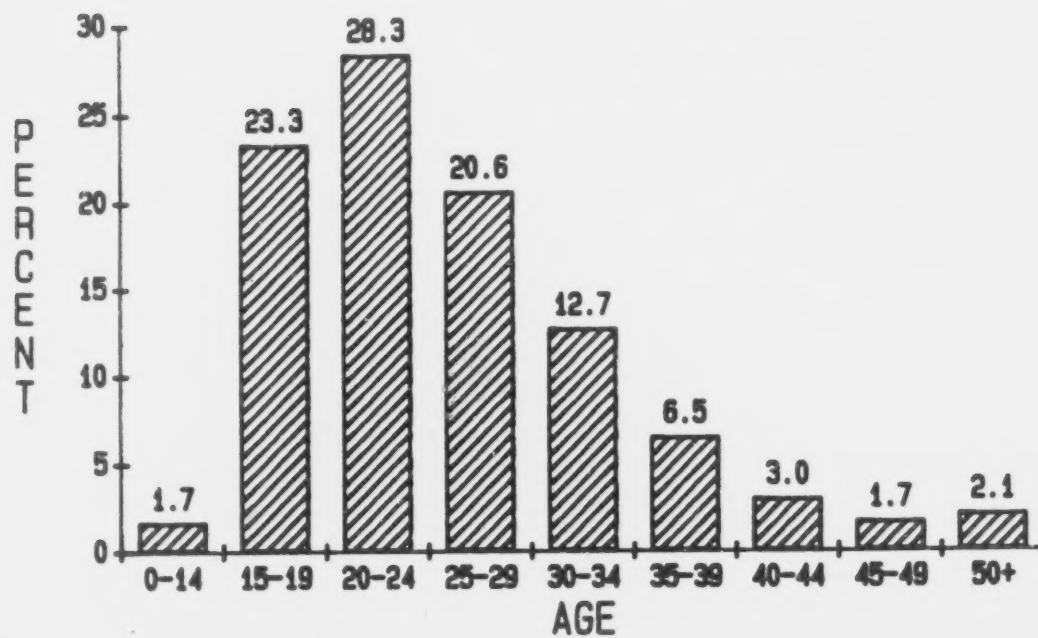
Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late and Late Latent		Congenital		Gonorrhea	
		Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1988	12,468,600	19,265	154.5	8,378	67.2	7,539	60.5	3,125	15.1	223	1.8	60,714	486.9
1987	12,112,800	15,666	129.3	7,440	61.4	5,224	43.1	2,892	23.9	110	0.9	62,944	519.6
1986	11,744,900	9,427	80.3	4,344	37.6	3,107	26.9	1,876	16.2	100	0.9	67,443	574.2
1985	11,377,318	7,969	70.0	3,679	32.3	2,504	22.0	1,755	15.4	31	0.3	57,647	506.7
1984	11,015,061	8,314	75.5	3,876	35.2	2,812	25.5	1,596	14.5	30	0.3	51,212	465.0
1983	10,645,793	8,404	79.0	4,179	39.3	2,501	23.5	1,699	16.0	25	0.2	53,370	501.7
1982	10,555,498	7,936	75.2	4,149	39.3	1,884	17.9	1,895	18.0	8	0.1	62,702	595.7
1981	10,108,564	5,971	59.1	3,036	30.0	1,376	13.6	1,552	15.4	7	0.1	60,354	597.0
1980	9,813,706	4,384	44.7	2,257	23.0	1,066	10.9	1,058	10.8	3	0.0	65,437	666.8
1979	9,294,250	4,567	49.1	2,099	22.6	1,297	14.0	1,164	12.5	7	0.1	61,427	660.9
1978	8,966,395	4,648	51.8	1,978	22.1	1,350	15.1	1,315	14.7	5	0.1	60,382	673.4
1977	8,717,334	4,543	52.1	1,828	21.0	1,957	22.4	750	8.6	8	0.1	58,843	675.0
1976	8,551,814	5,528	64.6	2,481	29.0	2,154	25.2	874	10.2	19	0.2	58,921	689.0
1975	8,485,230	6,328	74.6	3,228	38.0	1,981	23.3	1,101	13.0	18	0.2	65,031	766.4
1974	8,248,851	5,518	66.9	2,915	35.3	1,624	19.7	966	11.7	13	0.2	61,507	745.6
1973	7,845,100	4,339	55.3	1,946	24.8	1,227	15.6	1,156	14.7	10	0.1	52,582	670.3
1972	7,441,500	3,692	49.6	1,680	22.6	1,189	16.0	807	10.8	16	0.2	43,688	587.1
1971	7,024,600	3,651	52.0	1,675	23.8	1,156	16.5	781	11.1	39	0.6	30,659	436.5
1970	6,841,500	2,983	43.6	1,398	20.4	990	14.5	567	8.3	28	0.4	24,089	352.1
1969	6,651,400	3,147	47.3	1,368	20.6	868	13.0	889	13.4	22	0.3	18,257	274.5
1968	6,468,700	3,615	55.9	1,595	24.7	898	13.9	1,058	16.3	64	1.0	14,331	221.5
1967	6,287,000	4,378	69.6	1,933	30.7	861	13.7	1,456	23.2	128	2.0	12,563	199.8
1966	6,105,900	5,699	93.3	1,890	30.9	972	15.9	2,692	44.1	145	2.4	10,884	178.3
1965	5,924,700	6,132	103.5	2,356	39.8	1,037	17.5	2,527	42.6	212	3.6	10,803	182.3
1964	5,743,000	5,908	102.9	2,005	34.9	1,011	17.6	2,667	46.6	215	3.8	9,402	163.7
1963	5,560,100	6,945	124.9	1,883	33.8	999	18.0	3,742	67.3	321	5.8	8,867	159.5
1962	5,375,600	6,004	111.7	1,632	30.4	1,505	28.0	2,676	49.8	191	3.5	9,902	165.6
1961	5,188,900	5,324	102.6	1,118	21.6	1,561	30.0	2,493	48.0	152	2.9	10,215	196.9
1960	4,999,000	4,115	82.3	639	12.8	1,047	20.9	2,254	45.1	175	3.5	11,122	222.5
1959	4,790,000	4,332	90.4	344	7.2	916	19.1	2,875	60.0	197	4.1	11,172	233.2
1958	4,571,000	3,186	69.7	201	4.4	741	16.2	2,056	45.0	188	4.1	10,329	240.5
1957	4,245,000	5,514	129.9	213	5.0	1,068	25.2	3,971	93.5	262	6.2	9,725	229.1

Beginning in 1978 the early latent syphilis category is limited to latent infections under 1 year's duration. The infections over 1 year's duration are now classified as late and late latent.

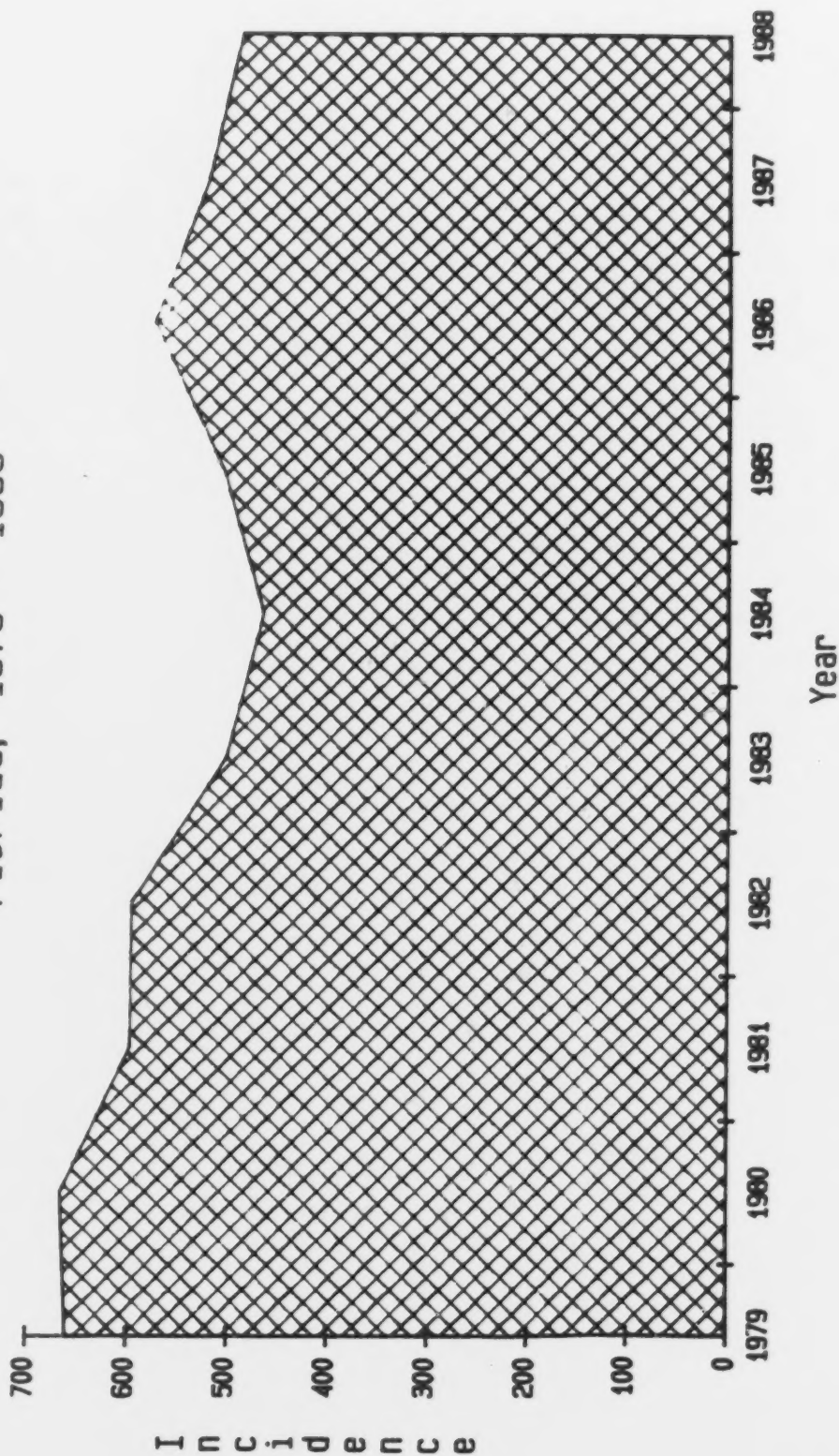
Penicillinase Producing Neisseria Gonorrhea (PPNG)
Reported Incidence Per 100,000 Population,
Florida 1979 - 1988



GONORRHEA - PERCENT OF REPORTED CASES BY AGE & RACE, FLORIDA, 1988



Gonorrhea Incidence Per 100,000 Population,
Florida, 1979 - 1988



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**Reported Cases of Gonorrhea by County
Florida, 1987 vs. 1988**

	1988	1987	%Change		1988	1987	%Change
District I				District V			
Escambia	1471	1429	2.9%	Pasco	228	285	-20.0%
Okaloosa	194	277	-30.0%	Pinellas	3993	4122	-3.1%
Santa Rosa	48	59	-18.6%				
Walton	22	16	37.5%	District VI			
District II				Hardee	66	72	-8.3%
Bay	259	434	-40.3%	Highlands	314	196	60.2%
Calhoun	17	37	-54.1%	Hillsborough	4832	5484	-11.9%
Franklin	12	9	33.3%	Manatee	1286	1252	2.7%
Gadsden	418	476	-12.2%	Polk	2284	2536	-9.9%
Gulf	12	22	-45.5%	District VII			
Holmes	9	10	-10.0%	Brevard	823	889	-7.4%
Jackson	92	88	4.5%	Orange	4863	4087	19.0%
Jefferson	83	81	2.5%	Osceola	203	146	39.0%
Leon	2154	2145	0.4%	Seminole	687	751	-8.5%
Liberty	4	7	-42.9%				
Madison	69	127	-45.7%	District VIII			
Taylor	51	78	-34.6%	Charlotte	71	88	-19.3%
Wakulla	13	31	-58.1%	Collier	507	631	-19.7%
Washington	35	38	-7.9%	DeSoto	117	136	-14.0%
District III				Glades	0	13	-100.0%
Alachua	1976	1624	21.7%	Hendry	76	68	11.8%
Bradford	64	27	137.0%	Lee	1335	1856	-28.1%
Citrus	101	143	-29.4%	Sarasota	563	619	-9.0%
Columbia	217	190	14.2%				
Dixie	21	20	5.0%	District IX			
Gilchrist	19	8	137.5%	Indian River	411	444	-7.4%
Hamilton	31	40	-22.5%	Martin	240	249	-3.6%
Hernando	118	97	21.6%	Okeechobee	57	105	-45.7%
Lafayette	18	8	125.0%	Palm Beach	3718	3791	-1.9%
Lake	349	466	-25.1%	St. Lucie	1131	931	21.5%
Levy	23	33	-30.3%	District X			
Marion	915	1008	-9.2%	Broward	4859	5875	-17.3%
Putnam	257	287	-10.5%				
Sumter	132	121	9.1%	District XI			
Suwannee	56	58	-3.4%	Dade	8956	9926	-9.8%
Union	18	8	125.0%	Monroe	210	169	24.3%
District IV							
Baker	62	44	40.9%	Institutions	470	254	85.0%
Clay	185	212	-12.7%				
Duval	7562	6709	12.7%				
Flagler	42	45	-6.7%				
Nassau	90	100	-10.0%				
St. Johns	203	199	2.0%				
Volusia	992	1158	-14.3%	STATE TOTAL	60714	62944	-3.5%

SECTION 7:

Summary of Tuberculosis



TUBERCULOSIS

Trends

In 1988, Florida ranked 6th highest among the 50 states with a tuberculosis case rate of 13.5 per 100,000 population. Thus Florida continues to have one of the highest tuberculosis case rates in the United States. There were 1,667 cases of tuberculosis reported in Florida in 1988, representing a 5.1% increase over the 1,586 cases in 1987. This represents a 2.3% increase in the rate per 100,000 population (Table 1). This is the fourth consecutive year that both the number of tuberculosis cases and the tuberculosis rate have increased. This upward trend in tuberculosis morbidity is predicted to continue as the result of the increasing incidence of AIDS and HIV infection. AIDS and TB surveillance during 1988 in Florida, revealed that 170 (6.3%) of the 2,706 AIDS cases reported during 1988 were also reported as tuberculosis cases.

Race, Sex, and Age

The race and sex distribution for 1988 shows that the highest number of reported cases occurred among non-white males, age 25-44 (Table 2). Non-white females in that same age group accounted for more than three times the number of cases reported among white females. The case rate per 100,000 in the non-white population was 49.6 while the white population rate was 6.8 (Table 3). Overall, males accounted for 68.7% of the

new cases while females accounted for 30.4% and sex was not stated for 0.9%. Persons under age 25 accounted for 12.0% of the reported cases representing an 12.1% increase over the 10.7% reported for this age group in 1987. The 65+ age group which accounted for 19.6% of the cases in 1988 also increased over the 19.4% reported in 1987. While these two age groups increased in 1988, there was a 1.0% decrease in the percent of cases (39.9%) reported for the 25-44 age group (Figure 1).

Case rates vary widely according to age, race and sex. The rate of 161.7 for non-white males age 45-64 is the highest and contrasts to the rate of 4.1 for white females of the same age group. For all persons the case rate is highest between age 45 and 64 years old (Figure 2). With the exception of the non-white females ages 5-24, the rate for non-white males is highest, non-white females next highest, followed in order by white males and white females (Table 3).

Bacteriologic Confirmation

Bacteriologic results were available at the time of reporting for 1,605 (96.3%) of the 1,667 cases reported in 1988. 1,542 cases (92.5%) were reported with positive culture and 63 (3.8%) were negative. Bacteriologic results were not available for 62 cases (3.7%) (Figure 3).

Site of Disease

Pulmonary tuberculosis was reported for 1,472 (88.3%) of the cases during 1988. Extra-pulmonary tuberculosis accounted for 195 (11.7%) of the total cases reported (Table 4). From 1979-1988 reported pulmonary tuberculosis cases increased 0.2% from 1,469 to 1,472 (Figure 4), moreover, extra-pulmonary tuberculosis cases increased 22.6% from 159 to 195.

Tuberculosis Associated with AIDS

Figure 5 shows the 549 AIDS/TB cases by year of tuberculosis report. The number of such cases increased over time from 1 or 2 cases in 1978-1980 to 165 cases in 1988. Of the 6,521 AIDS cases reported through 1988 in Florida, 8.04% have also been diagnosed as having tuberculosis. Because of the interval between the tuberculosis case report and AIDS diagnosis it is estimated that an additional 2 to 3 percent of the AIDS cases reported through 1988 will develop tuberculosis during the following year.

The fact that 8.0% of AIDS patients in Florida have had tuberculosis suggests that the immunosuppression caused by human immunodeficiency virus (HIV) infection results in the progression of tuberculosis from latent infection to disease.

In addition to the high rate of tuberculosis in confirmed AIDS cases, the rate of tuberculosis in HIV infected, but not AIDS confirmed, is estimated to be extremely high. For example, in Dade County, more than 21% (91/431) of patients diagnosed

with active tuberculosis between October 1, 1985 and October 31, 1988 were infected with HIV. Before the advent of AIDS, tuberculosis in Florida showed a steady annual decline in case rate. For the three years prior to 1985 the rate declined an average of 6.5% per year. In 1985 the tuberculosis rate increased 2.5%, in 1986 it increased 1.6%, in 1987 it increased 3.9% and in 1988 it increased 2.3%.

Geographic Distribution

Tuberculosis case rates for 1988 by HRS District ranged from 22.7 in District XI to 5.5 in District I. The rate increased in 31 counties and decreased in 32 counties. Seven counties reported no cases during 1988. Of these seven counties, five (Calhoun, Dixie, Gilchrist, Liberty and Lafayette) also reported no cases in 1987 (Table 5, Figure 6).

In 1988, as in 1986 and 1987, the majority (70.6%) of new cases were reported from eight counties with metropolitan cities (Dade, Hillsborough, Broward, Palm Beach, Duval, Polk, Orange and Pinellas counties). These eight counties reported 1,170 of the 1,667 cases reported during the year. Of these eight counties, only Dade was among the 10 Florida counties having the highest case rate per 100,000 population. Nineteen counties had case rates above the state average of 13.5 and 48 counties recorded rates less than 13.5 per 100,000 (Table 5).

FIGURE 1

TUBERCULOSIS - REPORTED CASES BY AGE,
RACE AND SEX, FLORIDA, 1987

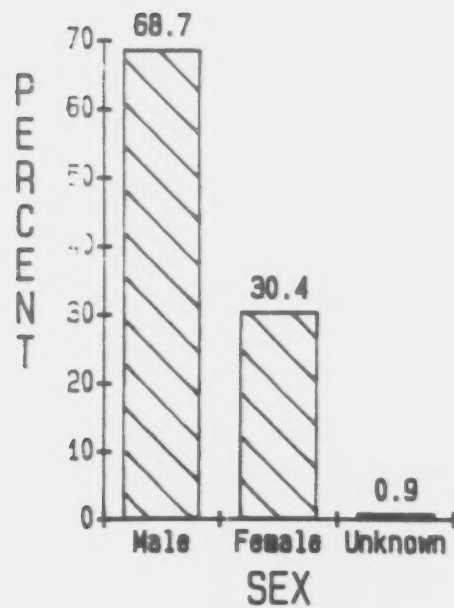
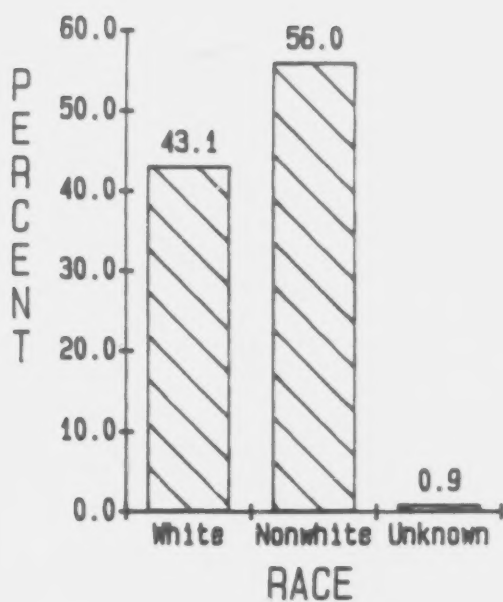
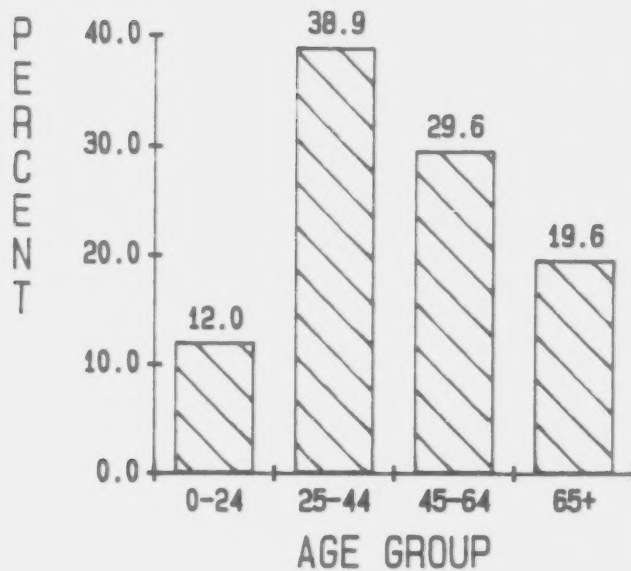


TABLE 1

**TUBERCULOSIS - Reported Cases and Rates per 100,000 Population,
United States and Florida, 1975-1988**

YEAR	United States				Florida			
	Number	Rate	Percent Change		Number	Rate	Percent Change	
			Number	Rate			Number	Rate
1975	33,989	15.9	----	----	1,758	21.0	----	----
1976	32,105	15.0	-5.5	-5.7	1,630	19.4	-7.3	-7.6
1977	30,145	13.9	-6.1	-7.3	1,674	19.8	+2.6	+2.0
1978	28,521	13.1	-5.4	-5.8	1,724	20.1	+2.9	+1.5
1979	27,669	12.6	-3.0	-3.0	1,628	18.4	-5.6	-8.5
1980	27,749	12.3	+0.3	-2.4	1,647	16.9	+1.2	-8.2
1981	27,373	11.9	-1.4	-3.3	1,553	15.3	-5.7	-9.5
1982	25,728	11.1	-6.1	-6.7	1,467	13.9	-5.5	-9.2
1983	23,846	10.2	-6.6	-8.1	1,457	13.9	-0.7	-0.9
1984	22,255	9.4	-9.0	-7.8	1,335	12.2	-8.4	-1.0
1985	22,201	9.3	-0.2	-1.1	1,425	12.5	+6.7	+2.5
1986	22,768	9.4	+2.6	+1.1	1,478	12.7	+3.6	+1.6
1987	22,517	9.3	-1.1	-1.1	1,586	13.2	+7.3	+3.9
1988	22,436	9.1	-0.4	+2.2	1,667	13.5	+5.1	+2.3

TABLE 2

TUBERCULOSIS - Reported Cases By Age, Race and Sex, Florida, 1988

AGE	Total	WHITE			NON-WHITE			RACE & SEX UNKNOWN
		Total	Male	Female	Total	Male	Female	Total
0-4	49	11	5	6	38	23	15	0
5-14	28	3	2	1	25	11	14	0
15-24	123	46	29	17	77	37	40	0
25-44	648	204	157	47	441	298	143	3
45-64	493	224	173	51	262	197	65	7
65+	326	230	146	84	91	68	23	5
All Ages	1,667	718	512	206	934	634	300	15

FIGURE 2

TUBERCULOSIS - Reported Case Rates By Age Groups, Florida, 1988

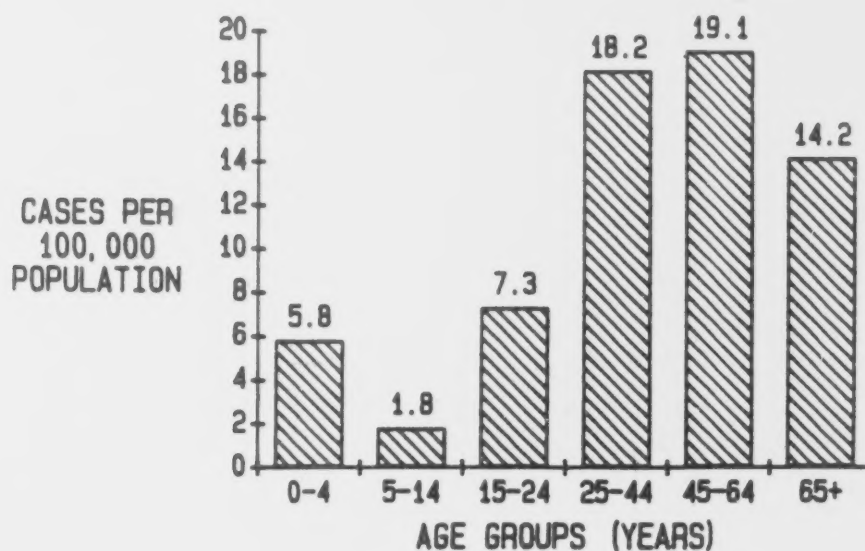


TABLE 3

**TUBERCULOSIS - Reported Case Rates Per 100,000 Population
By Age, Race and Sex, Florida, 1988**

AGE	TOTAL	WHITE			NON-WHITE		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
0-4	5.8	1.7	1.5	1.9	17.7	21.2	14.2
5-14	1.8	0.3	0.3	0.2	7.3	6.3	8.3
15-24	7.3	3.4	4.2	3.1	23.2	22.5	23.8
25-44	18.2	6.8	10.5	3.2	76.1	109.5	46.5
45-64	19.1	9.7	16.1	4.1	96.5	161.7	43.4
65+	14.2	10.6	15.7	6.8	64.3	118.7	27.3
All Ages	13.4	6.8	10.0	3.7	49.6	70.5	30.5

FIGURE 3

**TUBERCULOSIS - Reported Cases By Bacteriological Status
At Time Of Report, Florida, 1988**

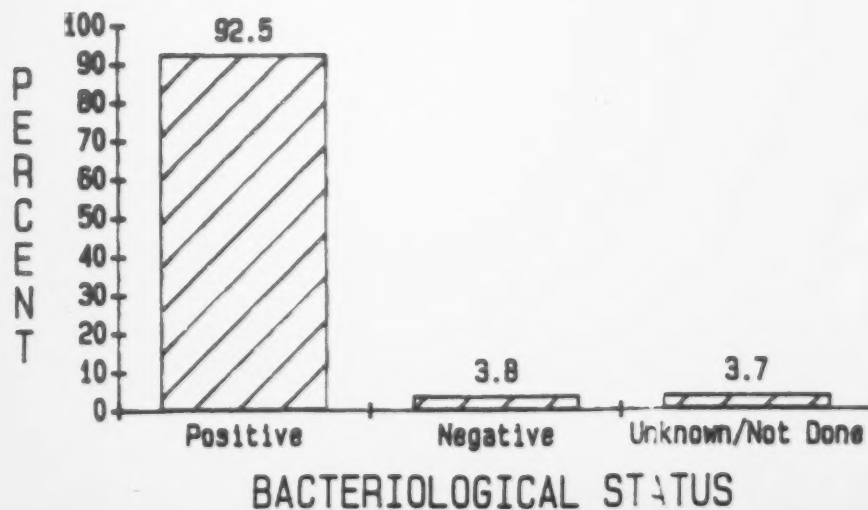


TABLE 4

**TUBERCULOSIS - Reported Cases and Percent by Site of Disease,
Florida, 1988**

Disease Site	Reported Cases	
	Number	Percent
Pulmonary	1,472	88.3
Extra-Pulmonary		
Pleural	42	
Lymphatic	43	
Bone and/or Joint	21	
Genitourinary	20	
Miliary	28	
Meningeal	11	
Peritoneal	06	
Other	24	
Total Extra-Pulmonary	195	11.7
Total All Cases	1,667	100.0

FIGURE 4

Number of Reported Pulmonary and
Extra-Pulmonary Tuberculosis Cases,
Florida, 1979-1988

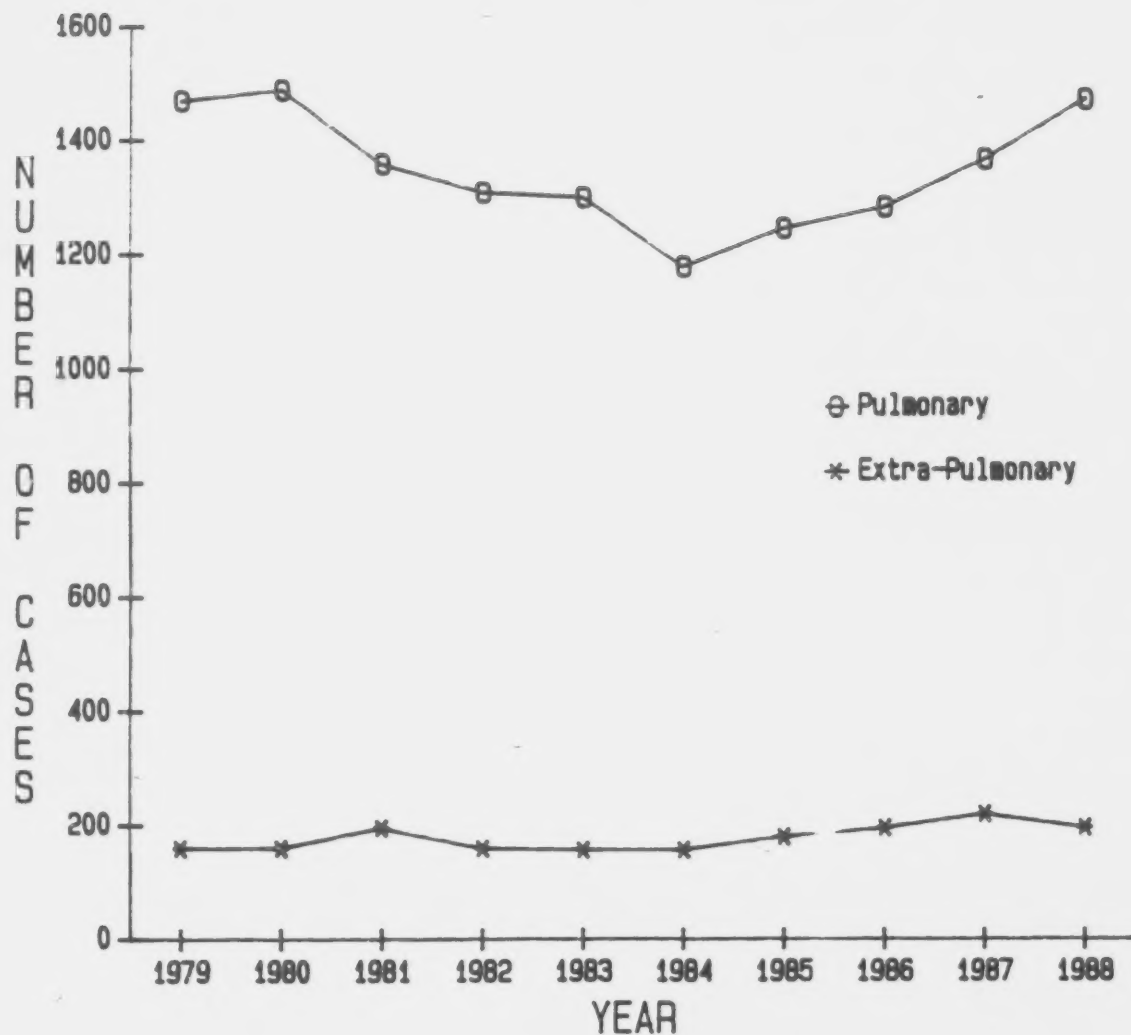


TABLE 5

*TUBERCULOSIS - Reported Cases and Rates Per
100,000 Population, By Rank, By County, Florida, 1988

County	Number of Cases	Rate Per 100,000 Population	Rank	County	Number of Cases	Rate Per 100,000 Population	Rank
District I				District V			
Escambia	16	5.7	52	Pasco	25	9.5	37
Okaloosa	4	2.6	59	Pinellas	62	7.4	44
Santa Rosa	6	8.9	38	District VI			
Walton	3	10.6	33	Hardee	11	49.5	1
District II				Highlands	8	12.1	26
Bay	17	12.8	22	Hillsborough	175	21.2	11
Calhoun	0	0.0	61	Manatee	27	14.4	17
Franklin	5	34.8	4	Polk	68	17.0	15
Gadsden	12	25.9	7	District VII			
Gulf	1	8.2	41	Brevard	25	6.4	49
Holmes	2	11.8	28	Orange	72	11.5	30
Jackson	3	6.9	47	Osceola	9	9.6	36
Jefferson	0	0.0	61	Seminole	20	7.5	43
Leon	11	6.0	50	District VIII			
Liberty	0	0.0	61	Charlotte	4	4.3	56
Madison	2	12.5	24	Collier	18	13.4	20
Taylor	4	21.2	12	DeSoto	3	12.8	23
Wakulla	2	14.2	18	Glades	2	26.7	6
Washington	0	0.0	61	Hendry	8	31.4	5
District III				Lee	22	7.2	45
Alachua	19	10.4	34	Sarasota	18	7.0	46
Bradford	1	4.1	57	District IX			
Citrus	5	5.8	51	Indian River	13	14.9	16
Columbia	2	4.8	55	Martin	10	10.8	32
Dixie	0	0.0	61	Okeechobee	4	13.9	19
Gilchrist	0	0.0	61	Palm Beach	142	17.1	14
Hamilton	2	20.3	13	St. Lucie	49	36.2	3
Hernando	3	3.5	58	District X			
Lafayette	0	0.0	61	Broward	140	11.5	29
Lake	12	8.5	39	District XI			
Levy	3	12.2	25	Dade	430	23.4	8
Marion	15	8.2	40	Monroe	4	5.2	53
Putnam	4	6.6	48				
Sumter	4	13.3	21				
Suwannee	10	37.3	2				
Union	1	9.8	35				
District IV							
Baker	4	21.4	10				
Clay	5	5.0	54				
Duval	81	12.0	27				
Flagler	5	23.3	9				
Nassau	1	2.2	60				
St. Johns	9	11.2	31				
Volusia	26	7.5	42	STATE TOTAL	1,667	13.5	--

Figure 5 - Reported Tuberculosis Cases
Who have also had AIDS, by Year of
Tuberculosis Report, Florida, 1978 - 1988

(N = 549)

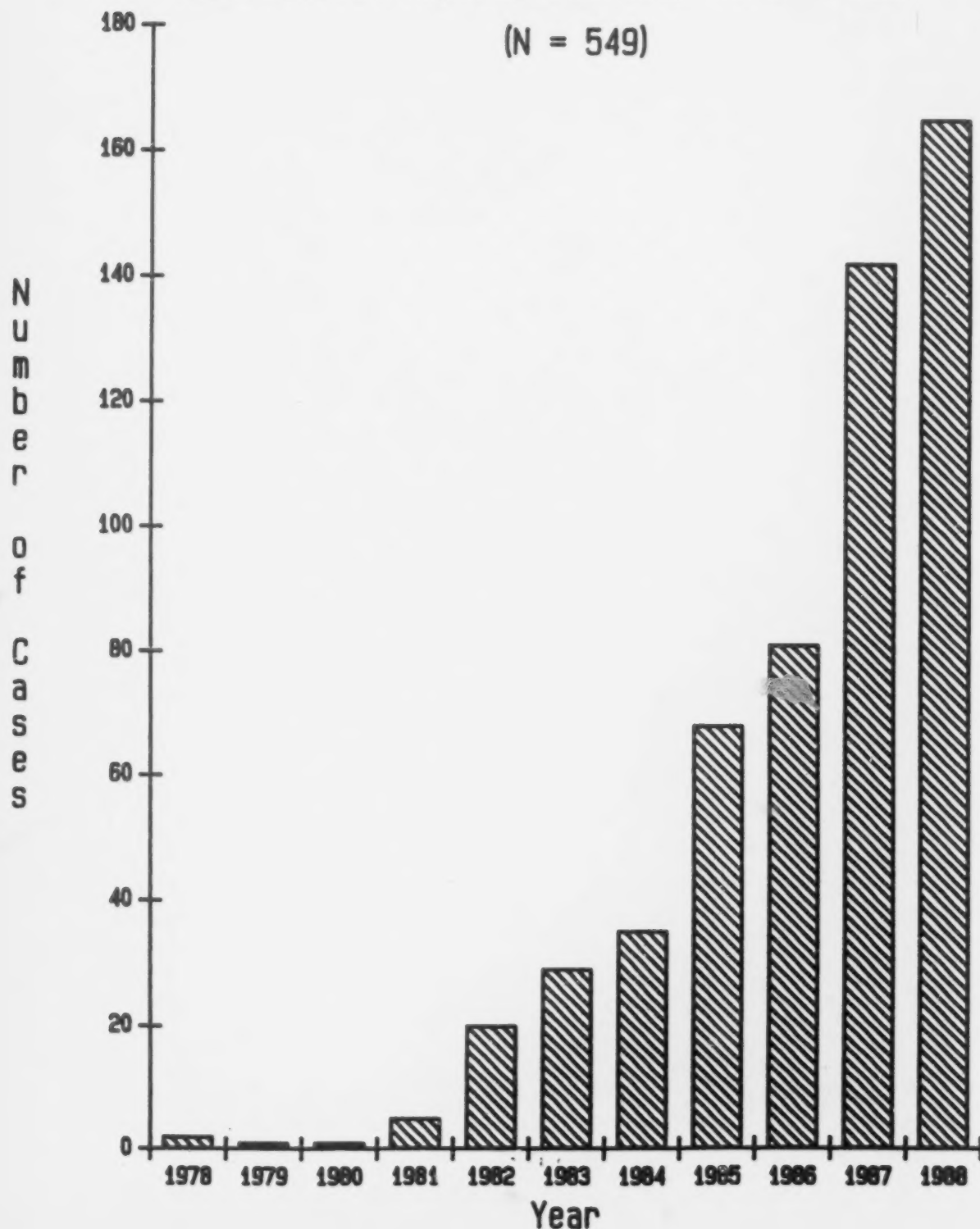


Figure 6

**Tuberculosis - Reported Cases and Case Rates per 100,000
Population by HRS Districts, Florida, 1988**



Florida Morbidity Statistics 1988

Published June 1990

This publication was produced by the HRS Communicable Disease Epidemiology Program at an annual Cost of \$5,01847, or \$7.72 per copy, to inform the public about communicable disease morbidity statistics in Florida, in accordance with Chapter 351, F.S. HRS complies with the state and federal nondiscrimination policies relating to race, sex, age and handicapping conditions.